DOCUMENT RESUME

ED 082 744 JC 730 244

AUTHOR Hunter, Walter E., Comp.
TITLE Implementing a Systems Approach to Instruction within the Community College.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE 10 Oct 73
NOTE 99p.; 1973 E. P. D. A. Part E. Summer Institute

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Community Colleges; *Conference Reports; *Instructional Improvement; *Instructional Systems; Junior Colleges; Post Secondary Education; Summer Institutes; *Systems Approach; Systems Development

ABSTRACT

Material presented at a 1973 E. P. D. A. Summer Institute on Implementing a Systems Approach to Instruction is assembled here: (1) Implementation of an Instructional System, (2) Dissemination of Instructional Systems, (3) Consortia and the American Community Junior College, (4) Instructional System for General Chemistry, (5) Activities of the Chemistry Group, (6) Activities of the Communication Skills Group, (7) Validation Report on Experimental Use of Common Skills Material, (8) Fundamentals of Mathematics, (9) Mathematics Sub Group, (10) Psychology System, (11) Introductory Psychology, and (12) Office Simulation. Participant statements, a list of participants and consultants, and evaluation report forms are also included. (KM)

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Implementing A Systems Approach To Instruction Within the Community College

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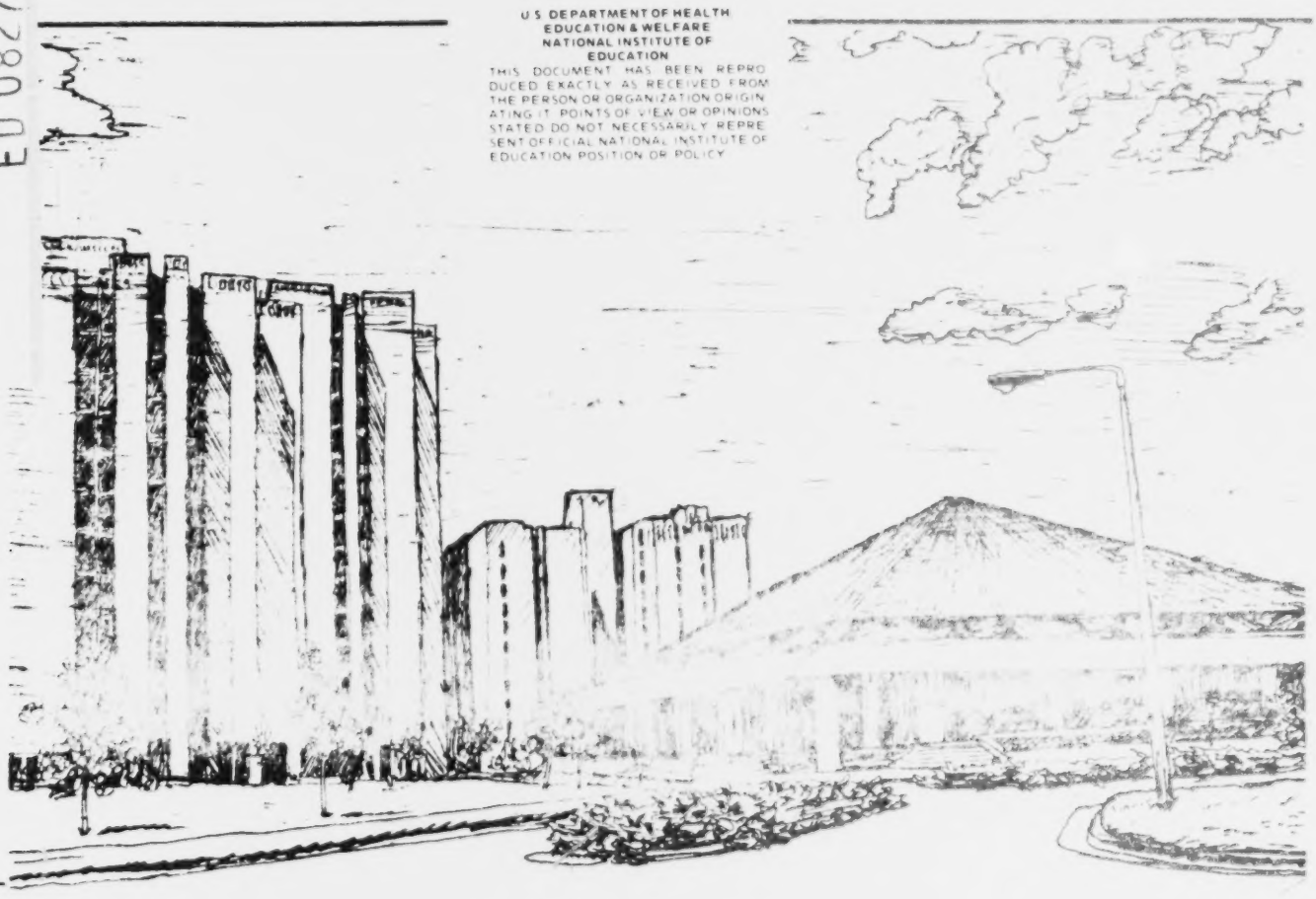

compiled by Walter E. Hunter

JC 730 244

1973 E.P.D.A. Part E. SUMMER INSTITUTE
U.S. DEPARTMENT OF HEALTH EDUCATION AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C.

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This report was assembled by Walter F. Hunter, Project Director. Errors of content and omission may be attributed to the assembler....1 October 1971.

1973 SUMMER INSTITUTE

IMPLEMENTING A SYSTEMS APPROACH TO INSTRUCTION
University of Colorado, Boulder
Williams Village

August 5	7:00-9:00 p.m.	Reception, Darley Commons Gwen Ritter, Hostess
August 6	8:30 a.m.	Initial Meeting, Darley Commons Conference routine
	10:00 a.m. - 4:00 p.m.	Small Group Activities with Conference Consultants. This activity is scheduled daily at this time.
August 7	8:30 a.m.	Mastery Learning Concepts Walter E. Hunter, Meramec Community College
August 8	8:30 a.m.	Behavioral Objectives - A New Look Barbara Washburn, Mitchell College
August 9	8:30 a.m.	Alternative Learning Activities Walter E. Hunter, Meramec Community College
	Evening	Cookout - Flagstaff Mountain
August 10	8:30 a.m.	Criterion Referenced Evaluation Barbara Washburn, Mitchell College
August 13	8:30 a.m.	Dissemination of Instructional Systems Floyd Urbach, T.A.P.
August 14	8:30 a.m.	Measuring Effectiveness Stephen Romine, University of Colorado
August 15	8:30 a.m.	Consortia & Exchange Richard Howe, League for Innovation
August 16	8:30 a.m.	Resource Allocation Thomas Shay, University of Colorado
	Evening	Cookout - Flagstaff Mountain
August 17	8:00 - 2:00 p.m.	Wrap-up activities

Consultants for Small Group Activities

Business Education	Beverly Funk, Everett College
Chemistry	Rudy Helder, Meramec Community College
English	Thomas Kepner, International University
Mathematics	Barbara Washburn, Mitchell College
Psychology	Lorraine Dieudonne, Foothill College

Institute Director	Walter E. Hunter, Meramec Community College
Assistant Director	Leahbeth Barnard, Arapahoe Community College

Implementation of an Instructional System
by
Community College Teacher

b. Analyze the course objectives with respect to content, scope and depth.

c. Consider the procedures used with respect to your assignment and college environment.

2. Modify the selected teaching-learning system for your use at least one of the following ways:

a. Sharpen the course objectives so that they communicate specifically the expected outcomes of the course. Check the evaluation procedures to assure a one-to-one match with expected outcomes.

b. Expand the course by adding a unit which you want your students to master.

c. Modify and expand the learning activities so as to provide the most exciting and penetrating experiences for your students...thus increasing the probability of student achievement of course outcomes.

d. Correct any error and/or omissions you find in the teaching-learning system.

e. Share your modification with the primary author and with other teachers involved in modifying the teaching-learning system.

3. Continue to improve your teaching-learning system and share these improvements with your colleagues.

The responsibilities of a community college teacher are immense. If teaching can be defined as an activity which causes students to learn one might suggest that if students do not learn it is difficult to assert that teaching has occurred. Our challenge is quite clear that we need to arrange our teaching so that our students achieve the expected course outcomes in spite of their individual differences and not because of their individual differences. If Benjamin S. Bloom's statement that..."Most students (perhaps over 90 percent) can master what we have to teach them... 'is valid (and most of us believe that it is)' then our task is before us, we need to work together to determine what we mean by mastery and to search for the methods and materials which will enable the largest proportion of our students to attain such mastery."

Walter E. Hunter
Institute Director

DISSEMINATION OF INSTRUCTIONAL SYSTEMS

WHAT IS DISSEMINATION?

The distribution of a physical or intellectual product to a user.

WHAT IS AN INSTRUCTIONAL SYSTEM?

Our group has defined an instructional system as an applied and tested set of materials and experiences which insures that the learner achieves stated objectives when the materials are used as designed.

WHAT DO YOU MEAN BY "APPLIED"?

To us the key to useful and usable materials is how well they work with students in the classroom with their instructor or instructional team. Applied means that the instructional system has been used under the conditions faced in normal day-to-day operation of the instructional program.

WHAT DO YOU MEAN BY TESTED?

We have defined three levels of "tested" instructional systems:

1. Validated/Verified - hard data is available which indicates that students do achieve stated objectives at stated criterion levels using well defined measures. There are few "validated programs." (We feel that most all of the programs at this institute are validated--Tom, you will have to use your judgement here.)

2. Field Tested/Model - data is available, usually from more than one tryout that the materials seem to work when used as designed. Student test data indicates that most students achieve objectives, i.e., the materials work with a range of student backgrounds and capabilities.

3. Pilot/Experimental - confidence in the evaluation data or measures is uncertain. Anecdotal evidence by the instructor/developer/ students indicates that the materials see, to work, at least in part.

THE KEY TO DISSEMINATION IS USE!

This institute is a dissemination effort. Five instructional systems have been selected. Teams of twelve instructors have been selected to learn how to operate and modify the materials and procedures of each selected instructional system to fit their own schools, students and teaching styles. THE KEY IS TO USE THE MATERIALS, OR THOSE PORTIONS OF THEM, WHICH WILL CONTRIBUTE SOMETHING TO THE DEVELOPMENT OF THE STUDENTS. By this definition, if the materials cannot be used upon returning to your institutions nothing has been disseminated!

WHAT COMMONLY BLOCKS DISSEMINATION?

One of the most critical blocks is simply--what do each of you face when you return back to your campuses? What happens when you begin to use these materials without the presence and support of teachers with similar interests? Without immediate resource to the developer to ask questions or to share day-to-day problems?

A second block you may face is "reluctant learners." Students must also be oriented to different styles of learning. They must perceive immediately that they are learning, that they enjoy the "new" approach. In short, they must feel that there is an immediate pay-off for themselves in terms of their time and effort in using the materials compared to whatever kinds of instructional experiences they have had previously--which might include some disastrous experiences with "instructional systems."

A third block you may face is your perception of your own teaching role and of your professional relationship to an instructional system which may be structured differently content-wise and which may require a different teaching style than previously. How much will you interfere with "using the system as designed?"

Obviously, we can continue this delightful exercise of citing all the things that can block the use of instructional systems or reduce the value of using the materials you are working with--the question you must ultimately answer is: How well is this combination of instructional materials and procedures working with myself (or the teaching team) and working for the students? Is the end result as good or better than some other alternative? Are students benefiting because of the materials or the learning processes which are used by the students? What are the trade offs with what kinds of advantages and disadvantages? Will I use the instructional system again?

If the dissemination (use) of the instructional system seems to be working, why is it working? Is it just the novelty of the approach--that is a good enough reason to use it, incidentally! Do I prefer it as a teaching strategy? Do students seem to prefer it as a learning strategy?

Know yourself, your students and your institutional setting!!!!!

A BROADER LOOK AT DISSEMINATION

The use of materials by new students, by new teachers in different institutions is one definition of dissemination. There are others. One definition of dissemination was arrived at by a project called TAP-Instructional Systems Clearinghouse which was set up as a federal project in the summer of 1971 and is now going into its third year.

TAP sought to identify and to assist interested persons in getting hold of fresh, innovative instructional systems. TAP has identified over 10,000 units of instruction--there is a tremendous pool of talent and creative energy across our

fair nation which is available to be tapped for the asking. To date we have prepared descriptive information on about 200 instructional systems and are advertising these materials nationally. Additionally, TAP has established a network of people and agencies interested in working on a local basis with the use of these materials. By identifying these regional sources of help--called network centers--we hope that local teachers can find convenient assistance to help them install fresh ideas into their school systems.

TAP, then, attempts to do three things:

1. Identify fresh, creative and interesting approaches to instruction and learning

2. Share this information on a national basis, and

3. Work with local teachers in using materials and adapting them to their own unique situation.

A BASIC QUESTION

One basic question, whether you are speaking of the objectives of this institute or the broad objectives of an organization like TAP, is Instructional Systems Development: Reinvention or Recycling?

It seems to us that too much time and energy has been spent in reinvention. We don't have the leisure to continue wasting our time and our students' time in making the same mistakes over and really not accomplishing much more than satisfying our own egos--and those of our administrators.

Teachers have been notorious plagiarists. In fact, some of the best teachers I know are out-and-out thieves of good ideas. We think that the conservationists idea of recycling is a good one to push--let's build on the ideas and the work of others. Let's save our creative energy and time for going further, for adapting materials to serve specific types of students, to spend out time working with students and to help our students get the greatest pay-off possible from the investment they make in our courses and our schools.

Floyd Urback

CONSORTIA AND THE AMERICAN COMMUNITY JUNIOR COLLEGE*

INTRODUCTION

In attempting to present both the background and current status of the consortia movement in American higher education, I have divided my paper into these three general parts: (1) definition and major characteristics, (2) history, scope, and need, and (3) variety and impact.

DEFINITION AND MAJOR CHARACTERISTICS

Definition

Contemporary interinstitutional cooperative undertakings are known as consortia. Consortia take many forms and embrace a variety of arrangements, agreements, and contracts in such a way as to enlarge upon the educational opportunities and programs that the institutions offer individually, severally, and jointly. The definition of consortium as used herein is so new that the closest Webster's dictionary comes to defining it is." (1)

More particularly my definition of a formal consortium is one that meets the following criteria:

1) a voluntary formal organization,

2) multi-lateral membership -- that is, three or more member institutions,

3) multi-programs and/or projects,

4) programs and/or projects administered by at least one full-time professional, and

5) required annual contribution or other tangible evidence of long-term commitment of member institutions.

Consortia as thus defined may quite possibly be a catalyst in American higher education to help provide a vehicular structure for bringing about innovation and change.

My rationale for limiting my remarks to formal consortia is that if any consortium or group of consortia in the nation today are effective in meeting and quite possibly resolving certain educational problems on the regional, state, and/or national scene, it might very well be one or more of these highly organized consortia.

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*Remarks presented at the Institute for Implementing a Systems Approach to Instruction Within Community Colleges With High Minority Enrollments, Sponsored by the League for Innovation in the Community College, at the University of Colorado Conference Center, Boulder, Wednesday morning, 15 August 1973.

By referring only to these formal consortia, I am purposefully not considering the hundreds of colleges which are participating in informal bilateral cooperative agreements--important though these are. In addition, I feel it beyond the purposes of our discussion here today to be concerned with consortia that have been organized through legislative action and executive mandate. Neither, I think, are we interested in interinstitutional programs that deal with athletics, debate, music or similar activities. Also I shall not talk about the significant accomplishments of such regional planning groups as the New England Board of Higher Education, Southern Regional Education Board, and the Western Interstate Commission for Higher Education.

Other types of consortia that may be mentioned only in passing are those that are those that are institutional based such as the American Association of Junior Colleges; those organizations and societies that strive to further particular academic disciplines like the American Historical Association; and individually based groups such as the American Association for Higher Education and the American Association of University Professors.

Major Characteristics*

Probably the most important quality that characterizes formal consortia is the voluntary type leadership which organized and administers the individual consortium. This, I think, provides an example whereby the educator-administrator recognizes a problem or challenge and seeks to find opportunities and solutions by consorting.

Geographical boundaries of consortia, as a rule, have been primarily local or regional. However, with the current means of transportation and especially communication, more and more consortia are becoming national and international in scope.

Although a diversified membership may be typical of a consortium, it appears that the basic rationale for membership is based primarily on the purposes and focus of the consortium. There are formal consortia that consist of particular kinds of colleges such as state universities and private church-related colleges. Most formal consortia, however, have an unrestricted membership that may include state universities, colleges for men and women, professional schools, junior colleges and technical institutes. A recent development in the movement has been consorting among groups of community junior colleges, the League for Innovation in the Community College and G T - 70 being examples of this phenomenon.

Control is generally by a council or board of directors composed of member college presidents and other representatives of the participating institutions. The delegation of administrative tasks, in several instances, has been made

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*The writer is indebted to George F. Donovan and his book entitled: College and University Interinstitutional Cooperation, (Washington, D.C.: The Catholic University of America Press, 1965), for ideas included in this section.

to other institutional groups such as deans, librarians, heads of departments, and faculty members.

The coordination of the programs, projects, and other activities is usually put into a central office -- ideally located off any of the member campuses -- headed by an executive director who often is a full-time appointee.

The position of executive director is crucial to the success of a consortium. The executive director should be the real leader of the consortium and to be successful he should combine the positive qualities of a college president and dean. But if he is the usual "president type" he will have his difficulties in relating to and working with faculty and if he is the usual "dean type" he will have problems in promotional matters and in fund raising. The executive director should be held in as high esteem as a board member (college president) and should be able to suggest policy to the board and also be able to carry out the policies of the board. Moreover, a director must exercise the role of change agent in education and thus must have widespread knowledge of innovative and experimental efforts in colleges and universities across the country as well as an understanding of the decision-making process at each member institution.

The financial support of consortia over the years has been and continues to be funded primarily by member colleges through subscription for services or other required annual contribution. Although consortia receive grants from various offices of the federal government and foundations and other public and private agencies, it is a mistake to depend on such sources annually for basic operational expenses. It is estimated that no more than approximately fifteen percent (15%) of all consortia income is received from grants or contracts.

The programs and projects of consortia that are limited, specific, well-defined, clearly understood and have built-in evaluative devices appear to be preferred over more general activities. Although at first, attempts may be made to cooperate in many ways among members, the most successful practice is to select and carry through particular programs and projects in which the participants are qualified to implement.

A constant search for information and methods to increase communication between and among members highlight the on-going activities of consortia. These attempts are facilitated through such means as making surveys, writing reports, planning proposals, conducting workshops and institutes, and disseminating newsletters.

Probably the most important characteriscis needed in a consortium is that it be flexible and seek to serve a regenerative purpose rather than attempting to replace one or more member colleges. Thus, in my judgement, a consortium should be an organization that serves only as a catalyst for educational change and institutional growth.

HISTORY, SCOPE, AND NEED

Cooperation among groups and colleges is not new.(2) There has been cooperation in higher education in an experimental limited way for more than two millenia, (3)

although the first formal consortium--in the sense which these are now defined--appears to be The Claremont Colleges in 1925. However, the recent rapid growth of institutions has raised interinstitutional cooperation for the first time to the level of a new educational dimension.(4) Thus, rather than colleges in a consortium losing their identities, an organizational configuration is added whereby member colleges retain their diverse philosophies and goals and still are able to benefit from the diversity provided by consortium-type relationships.

The history of the consortia movement in American higher education is replete with statements as to the desirability of cooperative relationships between and among colleges and universities. As early as 1934 Daniel Sanford in writing the first study on interinstitutional agreements, noted that

> it has been seen that in the interest of greater economy and more adequate provision duplication must be avoided and there must be differentiation through allocation of particular endeavor to different institutions. This necessity has led to integration and coordination.(5)

In his comprehensive study Sanford identified 117 colleges engaged in 50 consortia--25 of which were multi-lateral.(6)

Lyman Glenny has written that

> prior to 1945 the lack of system and rationality of organization in higher education stamped the development of colleges and universities in most states. Each (college) had its own lay board of trustees, each pursued goals, established programs, and sought students with little or no regard for what other institutions, distant or near, were doing.(7)

The Educational Policies Commission pointed out over ten years ago that through most of American history, colleges have been faced with tasks of recruiting students, finding necessary funds, building the essentials of a plant, and struggling not only to justify the hopes of founders but even to exist.(8) It would seem, however, that important differences are now present and that the need for competition has diminished. The problems of colleges and universities today are more nearly problems of all higher education than of individual institutions. The tasks of today, it would seem, are tasks common to all institutions, and the needs are not only for expansion, but also for efficiency, planning, cooperation, and coordination. (9) The Educational Policies Commission further stated that

> in present experiments and trends looking toward coordination lie some of the best hopes of both expanding and improving American higher education. (10)

John Jamrich writes that there has been an upsurge in the effort toward cooperation among numerous groups of colleges and universities during the past decade.(11) This trend suggests to me that there are new attitudes among institutions of higher education and the prevailing thought appears to be more conducive towards merging more efforts and programs. The fact that those

of us here are participating in a discussion on consortia underscores the rising interest in consorting.

Raymond Moore wrote in 1967 that the cooperative movement is just now developing.(12) In his study, A Guide to Higher Education Consortiums: 1965-66, Moore lists 1,017 existing consortia, 245 planned, and 34 discontinued. One-third (344) of the existing consortia are formal or multi-lateral. (13) This is an almost unbelievable increase from the 25 formal consortia listed by Sanford in 1934. Moore goes on to say that the figure is unquestionably conservative, and that there may well be a thousand more formal and informal consortia. He thinks that there may be many more because American colleges and universities showed an average awareness of only about 30 percent of their cooperative arrangements, even though 91 percent of them responded to the study. In fact, if bilateral consortia are excluded, the awareness quotient drops to about 20 percent, since that is the percentage of schools involved in multi-lateral consortia that actually reported those mechanisms. (14)

Sister Mary Delores Salerno reported on patterns of interinstitutional cooperation in 1966 and listed several factors that may be attributed to the phenomenal growth in interinstitutional cooperation: first, there is prevalent in the world today a more widespread acceptance of the value of interdependence as well as self-sufficiency. Second, examples of successful joint business and educational enterprises are creating interest in these endeavors with the desire to emulate them. Third, educators realize that the survival of many small institutions is at stake. Fourth, administrators are seeking through cooperation to expand their educational offerings and services more economically, efficiently, and effectively. Fifth, the state, with its master plan for higher education, often ignores some existing and well-established colleges and universities and thus subtly compels administrators of these institutions to explore every possible means to achieve their goals. To these might be added a sixth factor--the possible availability of foundation grants for forward looking cooperative programs.(15)

Elmer West writes that the time is past when we must present a rationale for interinstitutional cooperation. He says that we are now thoroughly acquainted with the problems of higher education and one method of solving them is through the development of associations or consortia of educational institutions.(16)

Ernest Boyer has written, however, that the hard reality

> is we are still very much in the dark about this thing called partnership in education. There is much confusion, and little interest about the basic question of just how interinstitutional arrangements in higher education really can be made to work. We have a vague idea that, for educational reasons, we should work together and that, for political reasons, we must work together.(17)

Although Thomas McConnell had long been an advocate of voluntary cooperation as an overall change agent in the field of higher education, in 1964 he came to the conclusion that purely voluntary methods are almost certain to be ineffective in the long run because:

> first of all, they are unlikely to produce the continuing and impartial planning on which a comprehensive and diversified system of higher education must be built. Second, they are unlikely to produce the efficient allocation of resources for educational expenditures and capital outlay that an adequately financed system of higher education requires.(18)

The Educational Policies Commission takes the opposite point of view by stating that

> ...voluntary cooperation may sustain the American system of varied sources of control for colleges and universities. With the rapid rise of coordinating agencies among public institutions rooted in the financial responsibility of political units toward them, it is highly important to strengthen the programs of voluntary cooperation involving both public and private institutions of higher education.(19)

Although the making of formal agreements between and among institutions of higher education is obviously on the increase, there does not at present seem to be agreement among educational leaders as to the consortium's reason for being and efficacy in reaching their united goals.

West refers to this point by mentioning that problems arise from the fact that too much is expected too soon of cooperation and that it takes time--lots of time, patient perseverence, some stubborness, meetings and meetings and meetings--but the potential payoff is substantial.(20)

VARIETY AND IMPACT

Variety

Of the 344 multi-lateral formal consortia in the country today, each can be said to be distinctively different either in terms of membership, organizational and and administrative patterns, and/or focus. Merton Ertell(21) has listed illustrations of cooperative relationships that provide program enrichment for both students and faculty, economy of operation in administrative and fiscal affairs, enhanced service to the community and cultural institutions, and other advantages which will assist in achieving more effective utilization of available resources.

Among formal consortia one may find both centralized and decentralized staffs and organizational frameworks; a multiplicity of academic programs in almost all areas and on all levels from students and faculty to administrators and trustees; administrative relationships dealing with planning and development; and all supported by either contributions, subscriptions, services, and/or grants.

Particular illustrations of different kinds of consortia are as follows: an example of the smallest formal consortium in terms of member institutions--three to be exact--is the Associated Colleges of Oregon and one of the largest is the Regional Council for International Education (Pittsburgh, Pennsylvania) with thirty-four members. Having the largest number of students is probably the Committee on Institutional Cooperation--the Big Ten and the University

of Chicago--with over three hundred thousand students.

Probably the most well-known consortium is the Union for Research and Experimentation in Higher Education in Yellow Springs, Ohio. The Union conducts workshops, projects, field centers, faculty and student exchanges, and was instrumental in initially planning and sponsoring a new national journal of reform, Change magazine, with a supporting grant from the ESSO Foundation.

As mentioned earlier in the paper a recent development in the consortia movement is the consorting between and among community colleges. Many consortia across the country include in their diverse memberships community colleges, private and church-related junior colleges, and technical institutes. Only recently, however, have community colleges as a group begun to cooperate and coordinate activities among themselves.

It appears that an idea for this consorting grew out of two national meetings on the community college. The first was an Invitational National Seminar on the Experimental Junior College held at Palo Alto (February 23-26, 1967), sponsored by the UCLA Junior College Leadership Program and Science Research Associates, Inc., and the second was a National Conference on The Experimental Junior College held at UCLA (July 10-12, 1967).

At the UCLA conference, Samuel Sava, Director of Professional Services, Charles F. Kettering Foundation, suggested that "the time is right to organize and establish a nationwide system of experimental junior colleges."(22)

As a result of these two meetings, several people who attended them have since become the leaders of at least four of the first community college consortia--two of which are represented in our session here today. Noteworthy too, is the fact that all of these new consortia focus on innovation, experimentation, and evaluation in attempting to bring about educational change and improvement.

Impact

In terms of numbers the consortia movement is expanding rapidly and a great many colleges are now coordinating their efforts in various cooperative programs, projects, and activities. However, the extent to which colleges are fulfilling the ultimate consortium ideal of interdependence is less obvious.

Interdependence as used herein means that there is a well-planned allocation of responsibilities in particular areas and projects, the results of which may be success in bringing about educational change and improvement, and thus exerting an impact.

Any impact that a consortium has on its members begins when "show-and-tell" sessions are over, various "dream bombs" are rejected, and common ground attempts may make is based on what happens on the campuses and not in the central office. Also possible impact will not be judged by the executive director nor will he do all of the work. The action begins and ends on the campuses. Ideas and initiative should come from students and faculty and decisions should come from board members (college presidents) who alone speak for their institutions to the consortium.

Any success enjoyed by a consortium should be measured in terms of its impact on the students, faculty, and administration. Are more students succeeding in our colleges? Are fewer dropping out? Do the teachers know more about learning and how it fits into the instructional process and are students learning more relevant knowledge that will help them to cope with society's problems? It may well be that new interpretations of the impact of consortia on colleges will lead us to realize that we have relied too long on individual autonomy.

Although most consortia to date are on the graduate level and deal primarily with interchanges of students, faculty, and facilities,(23) consorting is here to stay and to increase in numbers on all levels--especially in the community junior college.

On a final note it may be observed that 708 colleges and universities which sent evaluative responses to Raymond Moore in his 1965 study, the vast majority viewed their consortia favorably--in the language of the questionnaire, "yes" 52.1 percent and "very much so" 41.9 percent, producing a total of 94 percent(24)--thus making the consortium a very viable entity in American higher education's future.

Richard D. Howe

Footnotes

(1) Webster's Seventh New Collegiate Dictionary (Springfield, Massachusetts: G. & C. Merriam Company, Publishers, 1967), p. 178.

(2) Kevin P. Bunnell and Eldon L. Johnson, "Interinstitutional Cooperation," Higher Education: Some Newer Developments, Samuel Baskin, Editor (New York: McGraw-Hill Book Company, 1965) p. 246.

(3) Raymond S. Moore, "Interinstitutional Cooperation," Current Issues in Higher Education (1967), p. 272.

(4) Bunnell and Johnson, Ibid.

(5) Daniel S. Sanford, Jr., Interinstitutional Agreements in Higher Education (New York: Bureau of Publications, Teachers College, Columbia University, 1934), p. 3.

(6) Ibid., pp. 18-19.

(7) Lyman A. Glenny, "State Systems and Plans for Higher Education," Emerging Patterns in Higher Education, Logan Wilson, Editor (Washington, D.C.: American Council on Education, 1965), p. 86.

(8) Educational Policies Commission, Higher Education in a Decade of Decision (Washington, D.C.: National Education Association of the United States, 1957), p. 109.

(9) Ibid., p. 114.

(10) Ibid.

(11) John X. Jamrich, "Interinstitutional Co-operation in Research and Instruction," College and University, Vol. 40 No. 1 (Fall, 1964), p. 25.

(12) Moore, loc. cit.

(13) Raymond S. Moore, A Guide to Higher Education Consortiums: 1965-66 (Washington, D.C.: U.S. Government Printing Office, 1967), p. i.

(14) Moore,"Interinstitutional Cooperation," loc. cit.

(15) Sister Mary Delores Salerno, D.M., "Patterns of Interinstitutional Cooperation in American Catholic Higher Education," National Catholic Educational Association Bulletin, Vol. 62 (May, 1966), pp. 5-6.

(16) Elmer D. West, "Opportunities and problems for Leadership through Local and Regional Consortia," Current Issues in Higher Education (1967), p. 277.

(17) Ernest L. Boyer, "Interinstitutional Cooperation and the Exchange of Instructional Materials," Current Issues in Higher Education (1967), p. 282.

(18) Thomas R. McDonnell, "State Systems of Higher Education," Universal Higher Education, Earl J. McGrath, Editor (San Francisco: McGraw-Hill Book Company, 1966), pp. 37-38.

(19) Educational Policies Commission, op. cit., p. 114.

(20) West, op. cit., p. 280.

(21) Merton W. Ertell, "Toward a Philosophy of Interinstitutional Cooperation," The Educational Record, Vol. 39, No. 2 (April, 1958), pp. 131-138.

(22) Samuel C. Sava, "The Foundation, the U.S. Office of Education, and the Experimental Junior College," The Experimental Junior College, B. Lamar Johnson, Editor, Occasional Report No. 12 (Los Angeles; UCLA Junior College Leadership Program, January, 1968), p. 21.

(23) Raymond S. Moore, Consortiums in American Higher Education: 1965-66 Report of an Exploratory Study (Washington, D.C.: U.S. Government Printing Office, 1968), p. 9.

(24) Ibid., pp. 17-18.

INSTRUCTIONAL SYSTEM FOR GENERAL CHEMISTRY

INTRODUCTION

A system for the instruction of general chemistry, especially for autotutorial instruction, independent study programs or for instructors using the Keller plan. The system is designed for classes that have a wide heterogeneity of student interests and abilities

These materials are prepared to help students learn chemistry at their own pace. With a general agreement that students learn at different rates and by different means, the older traditional lockstep method of instruction is limited in success. Learning is an individual task and instruction should obviously be designed to maximize individuality. To encourage this, the audio-tutorial technique has been included as one string to our bow. The Discussions are closely keyed to the audio tapes which permits students to read and listen simultaneously to the materials. This enhances learning since the student is applying two senses: sight and hearing. Students who have reading problems find that this approach is of great help to them. Obviously, if a student is an excellent reader and learns best from the printed page, it is of little meaning to him to insist that he also listen to the audio tape. Further, textbooks, films and other visual aids, and laboratory experiments are programmed into the course so that it is a semi-programmed, multi-media approach to general chemistry instruction.

It should be noted that this system is much more than an "audio tutorial" course since no attempt has been made to be parochial about the student's use of the magnetic-taped material. We have regarded the audio tape as only one means to assist in the student's learning. Basically, how the student learns best is something we are not yet able to define closely. We do, however, feel that the student should be exposed to many different sources for learning and we insist that he use those resources from which he learns most efficiently, whether they be written materials, audio or visual materials, laboratory experimentation, "buddies", classmates or teachers, or the wide world. Further, we attempt to teach the student to search for learning materials from many sources with the aid of educational objectives which are included in each Unit of the Student Response Book.

This individualized instruction allows the student to grow in confidence and independence and teaches him that with the help of clearly thought-out objectives, he has the knowledge and resources to learn without necessarily being in a formal classroom.

A key point to our system is the frequent feedback that is tailored into the course. By frequent feedback the student soon uncovers those points that are causing him difficulty and he is then in a position to do remedial work before he proceeds to a point of no return. The instructor is also able to pinpoint the student's difficulty more readily and thus prescribe alternate learning materials. This is in sharp contrast to giving one quiz in a three week period and then attempting to help a student who is having problems. Here the instructor is frequently overwhelmed because he is unable to know where to start effective remedial work.

DISCUSSIONS ON GENERAL CHEMISTRY & STUDENT RESPONSE BOOK

The Discussions are written in a clear, concise yet interesting form, divided into 22 Units which require from one to two week's work, depending on the subject matter. The Units are as follows:

UNIT		SUBJECT	
I	Matter, Measurement & Energy	XII	Reaction Rates & Chemical Equilibria
II	Charge Flow & Subatomic Particles	XIII	Chemical Thermodynamics
III	Atomic Structure	XIV	Electrochemistry
IV	Periodic Table & Periodicity	XV	Acids,Bases & Ionic Equilibria
V	Chemical Bonding	XVI	The Metals
VI	Nomenclature & Equations	XVII	Noble Gases & the Halogens
VII	Calculations & Atomic Masses	XVIII	Boron, Carbon & Silicon
VIII	Properties of Gases	XIX	Nitrogen & Group V-A Elements
IX	The Solid State	XX	Oxygen & Group VI-A Elements
X	The Liquid State	XXI	Nuclear Chemistry
XI	Solutions	XXII	Stereochemistry & Organic Chemistry

The Units are well balanced between theoretical and descriptive chemistry. A shift back to more emphasis on desceiptive chemistry was felt desirable after it was observed that students could write atomic structures of chlorine gas yet were completely in the dark concerning any of the physical or chemical properties of this important element, not to mention commercial uses.

Students use the Discussions and Student Response Book together as they study. To aid in "feedback", the student is frequently requested in the Discussions to carry out some overt response, such as answer questions, do calculations, read supplementary material, view a film loop, or do a laboratory experiment. These responses are detailed in the Student Response Book. The student can later check his understanding by referring to the Answer Sheet for that Unit. All the Exercises have answers available to the student. In essence, the SRB functions as a study guide as well as a laboratory manual. One or more experiments are incorporated in the first 15 Units. Normally, a brief qualitative analysis scheme is done during the last 8 weeks of the second semester while descriptive chemistry is being studies. Here we have used inexpensive paperbacks or modular experiments (Franz and Malm, Freeman Co.) for laboratory instructions. If qualitative analysis is not desired, modular experiments on descriptive chemistry are available from several publishers, usually at 25 cents per copy.

Unlike normal study guides used with a textbook, the SRB is an integral part of the "textbook" (Discussions) and leads the student through a systematic series of responses which amplify and clarify the topics being discussed. This leads to more effective learning than attempting to master a large volume of material and subsequently attempting to do homework problems.

The SRB begins each unit with a bibliography of Resource Material listing representative textbooks, programmed materials, and Instructional film loops or filmstrips available. We normally keep these reference materials either in the Library in the Chemistry Department or in the Resource Learning Center of the College.

A set of educational objectives, written in behavioral terms, is next given which informs the student of the minimum expected of him as a result of studying that unit. All quizzes are based on these objectives to insure that the student uses them as he studies the unit. The remainder of the Unit consists of Figures, Tables, Diagrams, Exercises and Problems, and one or more laboratory experiments, as previously discussed. The Exercises are printed in open format so that the student may do his work directly in the SRB.

Since the System is divided into Units, students need only carry the current Unit with them; a convenience students appreciate considering the bulk and weight of many modern textbooks.

TAPESCRIPTS, VISUAL AID SHEETS AND AUDIO TAPES

Tapescripts are available for all 22 Units. These are provided so that the instructor may prepare the audio tapes in his own voice, one that his students associate with the course. Psychologically, learning appears more effective if the person whose voice is recorded is known and respected by the students, since an informality and closeness is generated. Further, the tapescripts may readily be edited by the recorder to include items of local color, humor, music, or other sidelights which lend to interest and enthusiasm at the local college level.

The basis for the tapescripts is the Discussions on General Chemistry. These have been carefully edited to remove equations, formulae and other sections which are difficult to follow on the audio tape. On a separate printed page, called the Visual Aid Sheet, the equations, etc. are enumerated for ready reference. The tapescript directs the listener to these printed portions and so greatly facilitates the comprehension during the time the audio tape is used. By using a visual Aid sheet, the student also saves considerable time since it minimizes the number of times the tape player is stopped and reversed to repeat portions that were missed on the first playing.

The combination tapescript and visual aid sheet makes learning from an audio tape exceptionally easy, particularly since the tape is divided into small portions to permit student response. For example, the student is seated at the learning station which contains a tape player with the Unit under study. He has brought with him the Discussions and Student Response Book. The Discussions are read as he listens to the audio tape which emphasizes the points necessary and at the same time gives the student the proper pronunciation of the scientific words used. After a short listening period, seldom longer than five minutes, the voice on the tape requests that the student do an exercise, study a diagram, work a problem, etc. and states "now turn off the tape and do _____". This is followed by an 8-second tone signal to inform the student of the change in activity. The purpose of this break in activity is to permit the student to see for himself whether he has learned that portion of the Unit and to avoid the monotony of listening for long periods of time. We have found that the student's attention can readily flag if the listening period is long. With the current System we are able to maintain high attention levels because the student's activities are frequently varied. The combination of being able to read the portion and at the same time hear it is an unusually effective procedure, particularly for those students who have reading difficulties.

An alternate use of the Tapescripts-audio tape is to use a textbook along with the audio tape and the Student Response Book. Here the tape presents the material in a different form and the Student Response Book acts as a study guide and Laboratory Manual. This is particularly well adapted for pure audio-tutorial instruction. Again, the "semi-programmed" aspects of the tape with a systems approach to give feedback to the student enhances the learning.

ADVANTAGES & EVALUATION OF THE SYSTEM

Our evaluation of the System has proven that it is much superior to traditional lockstep lecture-laboratory instruction. Repeated surveys have shown that students prefer this means of instruction by a large majority. Greater interest in chemistry and science has resulted based on the number of students who now are interested in majoring in some field of chemistry or biochemistry.

Our results, as demonstrated by grades achieved based on evaluation, performance on educational objectives and not on a probability curve, have raised our A and B level to about 50% and, at the same time, lowered the D and F level to less than 20%. Previously, using traditional lecture-laboratory instruction with the same teacher, we obtained about 35% A's and B's along with 35% D's and F's. These figures are based on the number of students completing the course, omitting those who dropped the subject. Using traditional instruction, about 30-35% dropped the course for various reasons. Currently, using the Instructional System, we experience 15-20% of the entire class that withdraws for all reasons. We are convinced that students develop more interest in chemistry and achieve greater learning through the systems approach.

Our results stem from classes over a four-year period and are sufficiently reproducible to convince us of the value of individualized instruction.

More subjectively, our students have responded the following on evaluations that are given every semester:

1. They become interested in chemistry and/or science generally because they could achieve despite poor high school chemistry or science grades.

2. They overwhelmingly prefer to work at their own time and when they desire. This assists in allowing more freedom to take part-time employment. About 85% of our students are engaged in such activities.

3. They find that learning can take place outside the formal classroom or laboratory and that they become knowledgable and capable of using many modes for learning beyond the traditional textbook.

4. They frequently ask if this System of instruction is open to them in more advanced courses or at other colleges.

From the instructor's point of view, the following advantages are observed:

1. At least 50-75% of "lecture" time becomes available to do supplementary activities. For example, one semester a series of lectures was given on the chemistry of drugs. Currently, a new series of talks, stressing the chemistry involved, concerned student's interest in ecological problems. Such lectures, which can only be considered if alternate avenues are open to the student to obtain the necessary subject matter, are highly motivational and are one of the reasons for an upswing in student's interest in chemistry. All experienced teachers recognize the need for well motivated students to achieve learning.

2. More time is available to the instructor to work with students individually or with small groups of students. At meramec we use one 50-minute session per week, called a "Seminar" during which we meet small groups of students to discuss the current Unit.

3. The higher skills of the instructor come into play more frequently using the system since he does not have to use valuable time in giving "lectures" which can be much better handled through the use of the System. This provides time for supplementary talks, demonstrations, development of examination questions and improvement of the System.

4. Lastly, teaching by using the Instructional System becomes more challenging and far less routine. It puts the fun back into teaching!

Rudolph L. Heider
Meramec College

ACTIVITIES OF THE CHEMISTRY GROUP

Eleven chemistry instructors from various sections of the country participated in the two-week program. Morning sessions were employed to describe the instructional system for general chemistry as devised by Dr. R. L. Heider. Participants first acted as students to study - via written word and audio tape - the greater portion of Unit IV on Periodicity. Later, during successive mornings, 30-40 minutes were used to discuss the following key topics: (a) educational philosophy pertaining to the junior college student, (b) construction of valid behavioral objectives, (c) development of written materials, exercises and lab work, (d) use of various types of visual aids, (e) making and using audio tapes, (f) evaluation of objectives, (g) scheduling and logistics, and (h) the Keller Plan (learning for mastery).

After a thorough indoctrination to the instructional system, participants were requested to consider writing a unit which might be used for a maximum of two weeks instructional time. Each participant elected a topic of his choice (no duplication occurred) and was asked to write a unit of instruction using the instructional system presented as a model.

All participants were requested to complete their units, have them typed and reproduced at their colleges. Copies of the completed units were then to be exchanged with each of the other participants whose home addresses had previously been distributed.

The modus operandi seemed to function quite successfully. Interest on part of the group was quite high judging by questions and excellent attendance to the group sessions.

Two field trips were scheduled. One to the campus to visit the libraries and chemistry building, and the second, to visit the laboratories of the National Bureau of Standards in Boulder. These were scheduled at appropriate times to help break the routine of writing thus offering welcome relief from difficult creative work.

Rudolph L. Heider

ACTIVITIES OF THE COMMUNICATION SKILLS GROUP

The two principle objectives of the Institute were accomplished:

1. General transferral of an existing system to the participants as to content material, strategies for instruction, and mode of instruction; and

2. Participants to begin development of instructional material using a systems approach to supplement the transferred system or supplement or replace instruction presently in existence at their respective institutions.

To support the accomplishment of the first objective, the following items were done:

1. Each participant received a complete set of 12 packages of individualized and mediated instruction of the materials developed at Lane Community College under the direction of the Oregon State Board of Higher Education, Teaching Research Division, Dr. James Nord, Project Director.

2. Each participant received an instructor's manual and a set of tapes which covered the operation of the system.

3. Each participant received four evaluations from instructors now using the system at colleges other than Lane Community College. These evaluations included specific suggestions for adaptations and alterations.

4. Each participant received a copy of the Lane Community College material as revised during the summer of 1972. This included the student handbook and the pre-system activities of the student and general mechanics of registration, credit hours, and grades.

   A report prepared by Mr. Sam Blackwell of Lane Community College was also included. In this report Mr. Blackwell explained the modifications made in the material for the 1972 revision.

5. Two of the packages of instruction were done by the participants with demonstration to show the role played by the instructor.

6. Each of the packages of material developed, and the 1972 revisions, by Lane Community College was reviewed in an oral presentation to include a demonstration by a participant.

7. A shipment of materials for 25 students was made to each participant except Arapahoe Community College which had two participants and only one shipment was made.

8. Participants, after exposure to the system, requested additional copies of specific packages to meet their unique needs. These have been shipped to them.

To assist the participants in preparing their own instructional materials in a systems concept the following items were done:

1. The nine step instructional system model of the Instructional Development Institute of the United States Office of Education NSMI was presented to the participants.

2. A prescriptive profile was prepared and distributed to each student to assist in meeting the diagnosed needs of the student and utilization of the transferred material, what was already in existence, and what each was preparing.

3. Each participant had 3 individual conferences with the consultant to discuss what each was developing and keep the development within a model.

4. A seminar was held to share the expectation of the Director and Assistant Director with the participants. Each of the participants then shared what was going to be used from the transferred material and what they were developing to be used upon return to their respective institutions. The three participants who chose to work outside the group also took part in this activity.

5. A second seminar was held on the last morning of the Institute to share participants' progress and/or accomplishments. It was further agreed that the consultant would gather evaluations and experiences with all materials during the last week of November and share it as a Christmas newsletter.

The degree of accomplishment is probably related in the main to the degree of readiness of the participants to accept a systems transfer and to develop instructional material systematically. If additional time had been available prior to where we started or during the first three morning sessions to the "how" of systems and instruction on the use of models it is probably also time that the eventual participant product and effectiveness and efficiency of transferral would have higher levels of expected results.

Tom Kepner
Corvallis, Oregon

Validation Report on Experimental Use of the Lane Community College Communications Skills Project Materials

By

Don Smith

Communications Arts Instructor

Alberta Vocational Centre

Calgary, Alberta

June 4, 1973

As one of those who participated in the Lane Community College Communications Skills Project, I felt that my experiences in using these materials in varied learning situations might be useful to people involved in your conference.

During the year 1970 - 71, these materials were used primarily with the communications skills students at Lane Community College; however, in order to test their overall effectiveness (and to corroborate some long-standing suspicions that Tom Kepner and I have held about English instruction) we decided to use the project materials with a high school completion class at Lane (high school drop-outs aged 14-18) which I taught as a regular part of the day program at Lane. Used this way, the materials could be validated against a spread student populations. But I hasten to add that the term validation is not used here in a strictly scientific way. What follows are my impressions as a teacher of English concerned about ways of encouraging effective communications by my students. Based on my experiences, I am convinced that the project materials work at least as well as other materials I have used in like situations and that the methodological design created by Mr. Kepner is the most effective one I am familiar with given today's students.

To take the second point first, this is not a program of <u>individualized</u> instruction. It is a design for <u>personalized</u> instruction. In a typical classroom situation, the teacher deals with a mythical mass student. Even the most effective teacher is seldom able to develop a 1:1 relationship with all persons in the class. This is especially true at the secondary and college levels.

Consequently, a major design feature of the material is that it buys time for the instructor to deal personally with each student. This feature was especially important in our decision to use the packages from the project with high school drop-outs, as more traditional methods had obviously failed to hold these people. It was our belief that teachers could not know enough about each student ordinarily to ascertain what their learning problems and styles actually were. Our program is designed to accommodate this problem in ways:

1. Through personal diagnosis initially.
2. Through the provision for tracks through the materials based on personal diagnosis.
3. Through our insistance that performance of terminal objectives be the only criterion for successful completion of each step.
4. Through personal diagnosis of pretests, enabling (midpoint) objectives, and exercises.
5. Through a design that encourages (at points even demands) students to seek consultation with an instructor.
6. Through the abandonment of time frame for completion of the various segments of each student's learning prescription.
7. Through allowing the instructor (facilitator) to alter a prescription at any point based on feedback from references.

There are two ways of abandoning a student. One is to allow him to hide in the anonymity of the classroom. The other is to put him into a program of individualized instruction, dependent on machines and programed material, and cut him adrift. Students realize both of these problems, and these high school drop-outs are especially sensitive to them. Therefore, it was extremely important that these students realize neither of these would happen to them. Furthermore, high school students tend to view "English" instruction as punishment. The A for Alan tape devised by Mr. Kepner

humanized the program from the outset and because of its personal, autobiographical nature, sets the tone for the entire program. The high school completion students responded to this tape very favorably. (I have since then used other versions of this tape with equal success in classroom situations.)

My conferences with the students further convinced them that there was something new about this program in that they discovered exactly what would be expected of them to complete the course successfully, and why. The tapes, the conferences, and the packages were each supportive of the student's efforts all through the course. Most had completed their prescriptions by the end of week five (of six) and only one student (of 26) failed to complete the program. Students commented favorably about the personal and entertaining nature of the program, and their overall progress was actually superior to that of the vocational students from the college day program who took this course concurently. I believe this to be the result of these students being mostly bright, turned-off young people who were frustrated in high school by a depersonalized atmosphere. When they realized that the materials were designed to help them personally they responded accordingly. For the more handicapped students, the Business letter package furnished a crucial taste of success that carried them through the rest of their prescriptions. For the less severly handicapped the Paragraph package did the same. And for the most able students, the Summary, Outline, and Process Writing packages provided instruction in organizing thought in writing which most had somehow missed along the way.

The germ of many of the ideas in the program were instructional materials developed for high school instruction, so it comes as no sur-

prise that these materials and the delivery system were effective with these students.

Again, beyond the regular vocational education program, it was decided to attempt this program with a group of students who were enrolled in the college freshman writing program (first term composition even though it was offered in the spring.) No attempt was made to pair off classes originally for comparisons, but rather this instructor's experiences with college writing courses were to be the basis for such comparisons. Additionally, students' comments on the program were invited, both formally and informally. Unlike the regular group or the high school students, however, none of these students began the business letter path through the materials because initial diagnosis (A for Allan) demonstrated no need for this route for any of these students.

Although many college staff members expressed doubt about this experiment I would have to call it a success on the ground that students who completed the program were as proficient in general organizational skills as other students in freshman composition, and my experiences tell me that it is this aspect of college writing that counts most. However, there is an important intangible here as well. These students chose to take the first term of composition in the spring rather than earlier. In some cases this was merely a scheduling problem, but I have found that, generally, students who begin this late have a low level of confidence in their writing ability. All students so identified were universal in their praise for the personalized nature of the program and their being able to get direct personal feedback on their writing should enable them to persist in these skills. To put it another way, this program has

proved to be supportive of the students who enroll in it on a personal as well as intellectual basis, regardless of their educational level. I feel it is most useful for the sort of students in the high school completion course or vocational program, but on the same basis a similarly designed program should work with any group of students. In fact, one of the main advantages that has not been mentioned is that the materials are supportive of the teachers as well as the students. Many teachers seem wary of "canned" programs as an infringement on their creativity. This program, while providing a basic structure and developmental material for basic writing skills, still leaves the teacher free to draw on his own teaching repetoire or even to substitute relevant material to suit unique local situations. The conferences, which can be conducted on both an individual or ad hoc, small-group basis, provide the teacher with an opportunity to do what he was trained for -- to teach. Rather than being restrictive, this program actually forces the teacher to be more effective, and with less experienced teachers it provides an in-service learning experience that no university school of education could match.

I would not want to leave the impression that there are no problems with this communications skills program, however. Probably the single most significant one is that, even with the least of orientation, too many students used to a classroom setting fail to make optimum use of the facilities and materials provided. Perhaps this problem can be taken care of in one of two ways:

1. By identifying those students least likely to benefit from the freedom the program provides and placing them in a different situation.

2. By maintaining scrupulous attention to the progress of each student through meticulously kept clinical records.

On balance, this problem is no greater than problems in other more traditional programs. The actual rate of attrition is no worse in this one than in the regular programs offered at the community college level. Our concern for this situation is probably the result of our expectations for the success of the project. Although it would be difficult to prove empirically, it is my conviction that even were there some malingering in this program there would still be a significant net gain in actual learning and in the ability to learn among these students, as compared to students in a classroom setting.

The only certain generalization to be made about this program is that teaching it is damned hard--and rewarding--work.

FUNDAMENTALS OF MATHEMATICS
Mitchell College, Statesville, N.C.

Mathematics 101-102 (Fundamentals of Mathematics for Liberal Arts Majors) is taught in a laboratory setting which allows for each student to progress at his own rate through the ten units of the freshman mathematics course. Math 101 is divided into 5 units--sets; logic; finite systems; systems of numbers (whole, integers, rational numbers); real numbers. Math 102 is also divided into 5 units--graphs, equations and inequalities; number theory; exponents, radicals and scientific notation; introduction to trigonometry; introduction to inductive proofs. With each unit the student receives a list of instructional objectives, a variety of instructional materials keyed to the objectives, practice test items. Each unit has its own criterion test measuring the instructional objectives.

Instructional Materials

The instructional materials for the course include instructor made mini-units (constructed to assist the student in mastering one or two objectives); instructor prepared tutorial tapes and worksheets (the tapes are informal-similar to what the instructor would say if she were sitting with the student and explaining the concept to him in a tutorial setting); video-tapes (review of key concepts); references to commercially available textbooks and workbooks. Some of the tapes also involve manipulation of objects according to the direction on the tape. Many objectives have two alternative routes for their accomplishment so that if the student fails to master the objective on the first try, he may attempt another instructional material (rather than going back through the same material). This feature also gives the student some choice in selecting the type of material with which he feels he learns best.

Pre-Test

A student by reading through the objectives may indicate to the instructor that he feels he already knows material in a particular unit. He may take the criterion test on that unit and pass off on the objectives already mastered. He then studies the material on the objectives he does not know and later requests the criterion test on those items when he feels he is ready.

Post-Test and Recycling

The student contracts with the instructor for a grade of A,B, or C depending on the number of objectives he masters in each unit as he proceeds through the course. The objectives are nested. For example, in a unit for a C, a student may master the first 15 objectives; for a B, the first 15 plus the next 5, and for an A, the 15C level objectives, the 5 B level objectives and an additional 3 objectives. Whenever the student requests the unit test, he is tested on the objectives for the grade he has chosen. In our example the C test would have 15 questions, the B test is the C test (with 15 questions) plus 5 questions, the A test is the C test, plus the B test plus test questions on the extra A level objectives. The student is not given a grade after the test but is told which of the objectives he has missed. He is then allowed time to restudy the material relating to the missed objectives and later take alternate test questions on the objectives he has missed. The student has to achieve a 100% performance on the level of objectives he has chosen, but is given several opportunities to do so. A student does not go on to the next

instructional unit until he has mastered the objectives of the unit he is on. At any point the student may renegotiate his grade. For example if a student who has originally contracted for a C wishes to work for a B and he has already completed the two units, he merely goes back to the first two units and goes through the materials relating to the additional objectives for the B grade, and takes the tests on the B level skills.

Revision

The materials are revised by two methods: student feedback and test item analysis of the criterion tests. Several units have been completely revised based on student comments concerning their confusions when going through the materials. Since there is a test item for each objective and each objective is keyed to specific instructional materials, when a large portion of the students miss an item, the instructor has clear direction as to which materials to revise. Proper sequencing of objectives can also be investigated by test item analysis.

Course Management

The Math Lab is open approximately 30 hours per week. Students register for a certain schedule of Lab attendance as a help to those who wish to structure their time. However, students are allowed to come at any time the Lab is open. What happens during the time the student is in the Lab?--students are working through the written mini-units, taking tests, and working with tapes and worksheets. The instructor and student tutors are tutoring those student who need help on a particular objective, going over tests with students who will need to take a retest on certain objectives, doing oral testing where appropriate, and generally checking on the progress of students through mastery of the material. All the materials for both Math 101 and 102 are in the Math Lab so that the day the student finishes Math 101 he can receive a grade and begin work on Math 102. The time factor for course completion is flexible--a student may take a year to complete Math 101 or he may complete Math 101 and 102 in less than the traditional semester.

Barbara Washburn
Austin, Texas

Mathematics Sub-Group

By the end of the institute, you will be able to:

1. Write an affective, cognitive and psychomotor objective.

2. Write a low level and a higher level cognitive objective.

3. Write a higher level cognitive objective and do a task analysis of it (at least 3 sub-tasks). Order tasks from simple to complex.

4. Write a cognitive objective and 3 criterion items to test for mastery of stated objective.

5. Explain the difference between norm-referenced and criterion-referenced evaluation

6. Write 5 affective objectives and what behaviors you would accept as indicating that the student possesses the desired attitudes.

7. Explain the difference between non-reactive and reactive criterion measures.

8. Write an example of each of the 10 common instructional variables listed in Developing Individualized Instructional Material by Johnson & Johnson.

9. Describe learning situations where each of the following would be most effective:
   a. audio tape
   b. video tape
   c. slides
   d. 8 mm movies
   e. combination of 2 of the media above

10. Describe the process by which you will revise your instructional units.

11. Complete personal objectives (all participants wrote objectives for work they wished to accomplish relating to the courses they would be teaching this fall).

12. Given a list of: a) elements of successful instructional programs and b) elements that lead to increased student self-esteem, write specific strategies you will employ in the design of your instructional program.

13. Given a list of questions relating to the design of a self-paced learning environment, describe how you will operate your program (by responding to the question list.)

14. Given the Force Field Problem Solving Program, complete the program by using the following problem statement:

    I want to implement a self-paced instructional mathematics program at my institution.

INDIVIDUALIZED UNIT CHECK SHEET

		Yes	No
1.	Is there a statement of the rationale for learning the material in the unit?	____	____
2.	Are the objectives clear statements of what the learner will be able to do after successfully completing the unit?	____	____
3.	Are the objectives logically sequenced?	____	____
4.	Is there an appropriate amount of both "lower" level and "higher" level objectives?	____	____
5.	Are the test items consistent with the stated objectives?	____	____
6.	Is there variety in the types of responses called for in the test questions?	____	____
7.	Is the criterion for judging acceptability of student responses clear?	____	____
8.	Is the approximate learner time required appropriate?	____	____
9.	Do the learning activities include:		
	Small steps?	____	____
	Frequent practice for the learner?	____	____
	Immediate knowledge of results to the learner?	____	____
10.	Are different media employed in the unit?	____	____
11.	Are the instructions to the learner clear?	____	____
12.	Are there provisions for gathering information to revise the unit from:		
	Error-rate data?	____	____
	Learner attitude data?	____	____

PSYCHOLOGY SYSTEM

This course is designed for you to learn at your own rate. It is called individualized learning. The class is based mainly around the text and cassette tapes. The text is broken into twelve units on various themes in psychology. Before you complete a unit in the text, you will come to the lab in S-27 and listen to a tape which is designed to go with and augment the material in the unit. After you have listened to the tape, and when you feel you have mastered the material in the text, you will take a progress check on the unit. If you answer less than 18 out of the 20 questions on the progress check correctly we will ask you to re-study the areas you have not yet mastered and take an alternate form of the test. If you are still having some difficulty with some part of the unit I will ask that you see me so that we can decide how to remedy it. As you can see, everyone who remains in the course has to be successful because you are successful at every step of the way.

The testing is one of the most important parts of the course. I need about twenty of you to volunteer as facillitators. This is really the best part of the course. Facillitators will work closely with me. When they have finished a unit progress check and mastered the material, they will give the check to other students in turn. Here is where you can see that what we are really interested in is that you learn. Your facillitator will go through the test with you as soon as you finish it. Most people miss some of the items, so you will go back over the ones you missed. Those items where you immediately recognized your error, you will be given credit. The ones you really didn't understand, your facillitator with discuss with you. If the two of you can't get it straight, I'm available to help. We hope no one leaves the lab with any misinformation. If you have talked with anyone about the course, you know that being a facillitator is the most fun and most worthwhile experience of the whole course. Come over to the lab and sign up for a time. We ask you for 5 hours a week. Of course if you can block one hour a day through the week that is best, but it is not absolutely necessary. You will receive 2 units of tutorial credit for your work in the lab. This looks very good on a transcript.

When you finish all the units or at the regular time for finals, you will take a hundred item final which covers the whole course. Your grade will be based on the total points you earn out of the total possible points. 90% will earn an A, 80% will earn a B and 70% will earn a C. Most of you will earn A;s or B's.

Because this is a course in individualized learning, a few of you will need more than one quarter to complete the course. A few of you will complete it in as little as four weeks (that's the record so far). For this reason we are able to give those of you who do not finish an NC grade at the end of the quarter. You do not re-enroll the following quarter, we carry you over automatically. However the computer is only bright enough to understand two quarters so if you need more time you will need to re-enroll for the succeeding quarters. Almost everyone who takes the course finished at least by two quarters, and at the time you finish the NC is erased and your grade appears as earned in the quarter you enrolled. If a disaster occurs and it requires a longer period of time the NC grade will remain on your record.

We meet here at the time you enrolled in the course in large sections and one day of the week. Roll will be taken in these sections and any absences this quarter will be interpreted by me as your message that you no longer wish to remain in the course and you will be dropped.

There are about 10 weeks in a quarter and you will be doing 12 units of the material. This means you should cover about a unit and a half a week plus the hour of listening time on the tape. We've found through experience that it is very easy to put off doing the work because no one is standing over you to get it done. So get started now and get one to two units a week done.

This quarter we are again able to offer an option for some of you who prefer interaction in small groups. We can take about 40-45 of you who will not be required to do units 9 and 11. You will be required to listen to the tapes for those units.

In addition you will be required to do a paper. This paper will not be graded although it will be carefully evaluated and will require thought on your part. It is part of your contract to the total grade in the course rather than an element to be graded in itself. The paper will be more fully explained in the seminars. The times and locations for the seminars are posted in the lab. If you choose this option be sure to both check your name on the roll sheet and sign up for the time you wish to attend the seminar. You will not need to attend the regular large lecture sections although you are welcome if you wish to do so.

If you wish to enter into this contract come to S-27 by Friday of this week and put a check by your name on the roll sheets which will be posted on the bulletin board. Be sure you do this because your check is your acceptance of the contract and the basis from which we make your permanent records. All other names will be dropped as no-shown.

So if you like the contract - get your materials. They are package of booklets called Introductory Psychology in the bookstore. Get started and have a successful quarter.

Lorraine Dieudonne
Foothill College

INSTRUCTIONAL SYSTEM
TECHNICAL DESCRIPTION

TAP CODE LD-14

TITLE: Introductory Psychology

DEVELOPER: Lorraine P. Dieudonne
Associate Professor

ABSTRACT

- Introductory Psychology presents learners with the major concepts and language used in psychology.
- This instructional system is designed for college undergraduates with the focus on self and peer learning.
- Learner attitude surveys after five quarters of field testing indicate a positive response to the system.
- This self-paced, two-quarter program employs the learners as peer teachers and teaching assistants. The learner works individually and attends one large group lecture session each week.
- Materials include cassette tapes and slides. Audio-visual staff plus one para-professional to assist the instructor are recommended. Facilities should include audio-visual equipment plus classroom space for the group lecture sessions. A teacher's manual is available.

GOALS AND/OR OBJECTIVES

This system introduces learners to the major concepts and language used in psychology. Specific objectives of the system are to enable the learner to:

1. take responsibility for peer teaching - learning
2. make his own decisions regarding how fast he will proceed
3. show an extremely high degree of mastery at each step as measured by progress checks
4. show general mastery as measured by a final exam.

CONTENT AREA

Psychology/Philosophy
Psychology (General)

LEVEL LEARNER TARGETS

College (13)

DEVELOPMENTAL STATUS

- Developmental stage
  - X Fully developed
  - ___ Under development
- Usage
  - X Currently in use
  - ___ Previously used
  - ___ Not yet ready to be used or tested
  - ___ Will be used next year

EVALUATION DATA

___ Validated

X Field tested

___ Pilot tryout

Technical Description prepared by:

TECHNOLOGICAL APPLICATIONS PROJECT
P. O Box 1028
Corvallis, Oregon 97330

For further information contact:
Mrs. Lorraine Dieudonne
Foothill College
12345 El Monte Road
Los Altos Hills, Calif. 94022

INSTRUCTIONAL SYSTEM
TECHNICAL DESCRIPTION

TAP CODE MD-14

ACTIVITIES

Student entry level skills required are those associated with college acceptance. The program is completely self-paced, and the learner works by himself, with the teacher on a one-to-one basis, and with a peer or proctor on a one-to-one basis. Learners, participating in the system, are utilized as peer leaders and teaching assistants. They administer progress checks to one another. This technique provides immediate feedback to learners, and mistakes can be quickly identified and corrected. The teaching assistants (learners) also perform clerical tasks. The teacher delivers a weekly lecture to the entire group and resolves individual problems that cannot be coped with by peer teachers. A teacher's manual, describing this system and operations, has been developed by Fred Keller, PhD.

EVALUATION

This system has been field tested for five quarters at the college level. The developer reports that the system possesses a high degree of reliability for goal achievement as measured by final examination results.

An attitude survey of learners indicates a positive response to the system.

MATERIALS

Teacher's Manual

Materials include cassette tapes, slides and print media.

AVAILABILITY AND COSTS

Available
For current cost information contact the developer.

INSTALLATION REQUIREMENTS

Substantial capital outlay is required for initial purchase of materials and expendable items. Support staff is necessary in the form of audio-visual and para-professional personnel.

COMMENTS

This system is designed to accommodate large numbers of learners.

It can be taught by one qualified teacher who is assisted by a para professional in addition to a number of proctors (learners) and peer teachers.

INSTRUCTIONAL SYSTEM
TECHNICAL DESCRIPTION

TAP CODE BF-57

TITLE: Office Simulation

DEVELOPER: Beverley M. Funk
Community College Instruction

ABSTRACT

• Office Simulation is designed to teach office practice skills in a simulated office setting.

• High school seniors and college freshmen can acquire job-entry skills through experiences which transfer from the classroom situation to a working environment.

• This system has been field tested for five years at the high school level and for two years at the community college level. The developer reports both objective and subjective validity established.

• This two-semester system requires learner participation for two hours daily. The simulated office is divided into five general areas of operation through which the learner progresses until he has learned all of the skills and procedures of a business operation. A workday, which provides the learner with actual office experience in a local business, is the culmination of this system.

• Standard audio visual equipment and business facilities equipment and materials are necessary for implementation. Simulated auto insurance forms, manuals, and charts are provided in this system. A detailed teacher's manual is included.

GOALS AND/OR OBJECTIVES

The goal of this system is to increase relevancy in the teaching and learning of office practice skills.

Participation in this system with the proper tools and materials will enable the learner to:

OPERATE a posting machine, proportional space typewriter, key punch machine, machine transcriber, mimeograph, copier, spirit duplicator, various calculators, and dictating unit

CONTENT AREA

Technology
Business
Business Skills
Office Practice

LEVEL LEARNER TARGETS

Community College (13-14)
Grade 12

DEVELOPMENTAL STATUS

• Developmental stage
[X] Fully developed
[ ] Under development

• Usage
[X] Currently in use
[ ] Previously used
[ ] Not yet ready to be used or tested
[ ] Will be used next year

EVALUATION DATA

[ ] Validated
[X] Field tested
[ ] Pilot tryout

Technical Description prepared by:

TECHNOLOGICAL APPLICATIONS PROJECT
P O Box 1028
Corvallis, Oregon 97330

For further information contact:

See Availability section for sources

INSTRUCTIONAL SYSTEM
TECHNICAL DESCRIPTION

TAP CODE BT-57

GOALS AND/OR OBJECTIVES cont.

CONVERT daily time cards into payroll journal forms, handle the various tax deductions, and produce appropriate paychecks
PRODUCE the correct letters, resumes, and application blanks necessary to apply for a job, be interviewed and tested for employment
RECOGNIZE and choose the correct attire for seeking employment
PRODUCE mailable letters, memos, carbon copies, and fill-in forms on the typewriter
WORK efficiently with office forms and supplies
COMPOSE and type various letters and memos
HANDLE incoming and outgoing mail which includes opening, routing, sorting, dating, and computation of postage
MAINTAIN a file of business papers
PLACE and answer incoming and outgoing phone calls, take messages, and telegrams
RECONCILE monthly bank statements
PURCHASE supplies on credit, verify orders, and pay for supplies
USE reference materials with ease and understanding
MAINTAIN checkbook, spread sheets, covering income and expenses of individual proprietorship or partnership
PROPERLY design an attractive letterhead
POST debits and credits on posting machine
COMPUTE prorata premiums based on endorsements for auto policies
TAKE a loss report over the telephone and convert facts to written copy
VERIFY documentation of applications for insurance
FOLLOW a document through an entire cycle beginning and ending with the customer
VERIFY RATING of insurance applications
DEVELOP better attitudes in dealing with self and others
SUPERVISE and evaluate other student learners

ACTIVITIES

For participation in this system, a learner must be interested in clerical/steno occupations and have completed one year of typing. Learners meet two hours daily for two semesters in a model office which contains five stations: Policy Operations, Contact Desk, Underwriting,

MATERIALS

Teacher's Manual:
The You in Simulation

Simulated Auto Insurance Forms
Simulated Auto Insurance Manual (procedures)
SAFECO supplied free forms
1 Agency Flow Chart
1 Company Flow Chart

AVAILABILITY AND COSTS

The materials are available free of charge from the following sources:
Washington Insurance Council, 1218 Third Avenue, Seattle, Washington 98101
- Simulated Auto Insurance Forms
- Simulated Auto Insurance Manual
- Agency Flow Chart
- Company Flow Chart

SAFECO Education, 4347 Brooklyn Avenue N.E., Seattle, Washington 98105: Attention: Mr. John Stanford
Teacher's Manual (The You in Simulation) and insurance forms for the simulation

INSTALLATION REQUIREMENTS

Standard audiovisual equipment
Standard business education office equipment
Expendable learner materials:
papers, forms, stencils, and masters
A workshop or seminar (conducted by an authorized SAFECO agent is desirable teacher training.

INSTRUCTIONAL SYSTEM
TECHNICAL DESCRIPTION

TAP CODE BF-57

ACTIVITIES cont.

Accounting, and Office Manager. Learner's enter the model office, occupy each desk for one week, and then move on to a job with greater responsibility. Numerous activities and experiences which provide job-entry skills are utilized. The model office simulates a business environment in the classroom. A teacher aided by a methods manual (The You in Simulation) supervises this model office. Assessment of learner achievement is based on situational tests, duties tests, performance criteria, ability to work with others, work volume, work accuracy, and self-growth. A workday, which provides the learner with actual office experience in a local business, is the culmination of this simulated instructional system.

A detailed teacher's manual accompanies this system and includes the following: Teacher Prerequisites; Student Prerequisites; How to Begin: Approaching a Business; Supplies, Equipment and Forms; Getting Ready for Pre-Simulation; Bank Loans; Interviews; Employment Testing; Selection of First Student in Model Office; Opening Day; Successive Days of the First Few Weeks; Continuing Activities; Bank Statement Reconciliation; Paying Bills; Income and Expense Statements; New Calendar Year Activities; First Semester Ending; Second Semester Activities; Endorsements; Continuing Second Semester Activities; Closing Activities; Testing; Training; Extra-duty Jobs; Workday; Motivational Factors; Evaluation; plus Charts and Forms and other Appendices.

EVALUATION

This system has been field tested for five years at the high school level and for two years at the community college level. A formal validation study has not been conducted; the developer reports both objective and subjective validity have been established from a comparison of pre-test and post-test results.

According to developer testimony, the system provides a fun learning experience for high school students in that they are encouraged to work with one another in an office-like structure with a minimal number of teacher "lecture" sessions.

INSTALLATION REQUIREMENTS cont.

Support staff necessary for system implementation: resource people from insurance industry
Optional support staff: school counselor for testing and interviewing, customer simulations coordinated with driver training class, and school nurse/home economics teacher for personal hygiene and grooming.
Existing facilities may be rearranged to accommodate this system.

COMMENTS

This system:
Acquaints learners with an office system and the cycling of a product or service through the creation and processing of documents;
Ties together previously acquired skills and knowledges so that learners may begin to use them effectively, think critically, and make judgments;
Provides a realistic setting wherein learners can begin to discover the relationships that exist between a business and its customers;
Provides a setting wherein learners can work closely with others to improve human relations.

Participant Statements

The following statements were made by the institute participants in response to these two questions:

"What did you accomplish during the institute?"

"How do you plan to implement improved instructional procedures during the 1973-74 academic year?"

"The most important thing I accomplished at this institute was the ability to weigh different levels of objectives. This information will be very helpful in writing objectives for my course and finding material to fit these objectives.

"During the year of 1973-74 I plan to complete the writing of objectives for my course and obtain material to support these objectives. The material I plan to use will be written by other educators; that in which I cannot find to support my objectives I will write myself. I am doing this to facilitate time in implementing a new system of instruction for my students. I hope to have the complete system in operation by the first of January 1974."

Willie Artis (Mathematics)

"I have become oriented to simulation as a part of business and office education. Not only have I learned the how-to and the theoretical concepts of this technique, but I have been exposed to individualized techniques to supplement simulation.

"In 1973-1974 I will begin to implement strategies used in simulation-planning for a full unit in simulation for the 1974-1975 school year.

"Other innovative Activities include the use of an A-T approach to Introductory Accounting, a course which I designed in 1972. This fall, 1973-1974 school year, I will be revising the accounting course, devising an A-T system for a second semester in accounting, implementing and directing an A-T system in office machines and shorthand. The shorthand system will allow a student to select specialties in legal, medical, or general secretaryship."

Mary Bacon (Business Education)

"I learned to organize and conduct a business office simulation class, from the opening day through the entire sequence of activities.

"I became familiar with several methods used by others of individualizing instruction.

"I observed good examples of audio-visual preparations and how they are used in the classroom.

"I became familiar with a number of outside resources available to classroom teachers-commercially published instructional materials, assistance from industry in providing resource people, and often providing both materials and equipment.

continued...

"I became familiar with a number of nonprofit organizations that will provide assistance and materials.

"I hope to enlist the cooperation of our department chairman and some of the instructors in our department to develop a program of individualized instruction in at least one course, then after one quarter, evaluate the results and make desired changes for the second quarter.

"I plan to explore with our department the desirability of simulation of our office procedures class, similar to what Mrs. Funk presented to us here.

"In our college, we have implemented a program for Word Processing/MTST/MCST, with individualized instruction, and we shall work on refining that for this coming year.

"I hope to prepare some mini-programs, preparing some audio-visual units for some courses."

-Lois Bean (Business Education)

"I plan to make a comparative study of my elementary algebra classes. Traditional method (fall semester) vs. individualized instruction (spring semester).

"I am always revising and trying new ides."

-Carl Benjamin (Mathematics)

"At this institute I had the opportunity of working with the office simulation techniques as developed by Mrs. Beverly Funk. She was able to impart to the participating college teachers a thorough knowledge of the techniques of this unique teaching method.

"I have begun to investigate the methods by which I will be able to adapt and employ the techniques learned at this institute. It is my intention to integrate these approaches in the curricula during the coming school year.

"I have inaugurated a program to contact industries within the area of our college with the objective of establishing upgraded training programs for their office personnel."

-Mrs. Marcella Blechman

"The institute helped me to avoid needless duplication of existing learning systems by furnishing an excellent system for adaptation. It also provided direct contact with an expert consultant, who gave practical advice on adapting and implementing a specific system. And the institute fostered interaction with other instructors committed to innovation.

"I will adapt and implement the system provided, as well as develop individualized instruction systems for two other required courses in English."

-Jim Brother (English)

"I have completed one unit of individualized instruction for chemistry to be used in the A.D. nursing program.

"I hope to adapt Heider's system in a trial group and to complete and implement an individualized system for the chemistry for A.D. nursing."

-Donald Dalrymple (Chemistry)

"The most valuable benefits will be derived from the dialogue among the consultant and the psychology participants. We know in detail how each of the others have been operating in the past semesters, and we have each formulated plans for the future and shared these with our group. The ILS packets of material and my plan for implementing their use (from my own brain and from picking the brains of our group) are my most significant accomplishments. We also had a very good social experience and all the friendships which I take with me are a valuable accomplishment. I might even rank this above the academic part, but I felt I should mention the "educational" aspects first.

"Within the limits of my college's structure and without the benefits of a Learning Resources Center, I plan to adapt the ILS course in one section of psychology in the fall. I will also continue with three sections based on a general psychology textbook (Hilgard), but adopting a number of procedural ideas from the systems approach: non-punitive grading, numberous avenues for obtaining grades, three attempts on each test, tests whenever the student feels prepared, flexibility with regard to attendance, etc. If I feel satisfied with the ILS materials, I will adopt them for the three courses of general psychology I teach during spring semester. Since I will be the "systems-approach spokesman" on our campus (or at least speak the language better than anyone else), I will also try to share what I have learned and encourage others on the campus to investigate this method."

-Mary Dudley (Psychology)

"During the Institute I learned of the systems approach used at Lane Community College and utilized the services of the English consultant to critique my course objectives.

"I plan to enlist the aid of my department to implement an English clinic. The clinic will in turn use the adapted package instructional materials which are suitable for our objectives. In addition I hope to encourage a colleague to develop package instructions."

-Dr. Glenn R. Groenke (English)

"During this institute I worked with Dr. Washburn on modifying three units of mathematics for general education, readying them for a self-pacing systems presentation.

"During the 1973-74 academic year I plan to rework more units from math for general education so that perhaps in the fall of 1974 I will be able to try the course in self pacing format in the classroom."

-Lucille Groenke (Mathematics)

"Because of lack of space, our college is not in a position to adapt an integrated plan of office simulation until at the very earliest 1976, when permanent facilities are completed. In a discussion with my division chairman, Mr. A. Rubenstein, he advised that I should make application as a participant in the Institute. I have very much appreciated this opportunity. I feel that my experience as a participant will be a real help to the department in planning for utilization of space and equipment in our new facilities.

"1973-74: My goal is to individualize instruction on as many of our pieces of office equipment as time permits - IBM Selectric typewriter; Magnetic Tape Selectric Typewriter; ten-key adding machine - with the use of audiovisual equipment and materials as demonstrated by Mrs. Funk."

-Adelle Gustafson (Business Education)

"I exchanged ideas with many teachers both thru discussions with them and by examination of examples of their work which they brought to the conference. I feel that my knowledge of the systems approach was greatly increased by the presentations of the speakers and the consultants. By reading the materials they brought and listening to the tapes which I made of all the sessions my insight into what is happening both in the present and what will happen in the future was greatly enlarged. I also read five books, relating to conference topics, wrote objectives and made a tape for an algebra package.

"During the 1973-74 academic year I plan to share the materials and tapes with the faculty at Central Piedmont both in my department and throughout the school. I also plan to put major efforts toward improved evaluation of materials now being used-especially in regard to planning revision. I will seek support to add use of additional media in my department such as tapes and worksheets for existing packaged material plus and/or sound or slides. I also plan to employ immediately techniques from the forced field problem solving seminar with department members and with students."

-Ida L. Helms (Mathematics)

"During this institute I became familiar with systematic, packaged instruction in basic English communication skills and with procedures involved in developing such individualized (writing workshop) instruction. I intend to promote such instruction when I return to my college since most members of my department are vitally interested in making our course offerings efficient, especially remedial work. I also prepared a systematic course outline that has dual objectives in improving reading and writing skills. Moreover, as a participant in this institute, I met and enjoyed a large number of concerned and capable teachers.

"My other involvement in innovative activities is not so much forward-looking as it is in keeping up with what I understand to be efficient teaching methods. Consequently, though what I am adapting, especially in media, may seem to be innovative to many, it is simply the attempt to implement current pedagogical suggestions and research. However, I am primarily concerned with the efficacy of teaching and learning by discovery methodology."

-Michael J. Herrick (English)

"Gained perspective on administrative problems of allocating resources. Gained perspective on ways to systematically approach instruction through writing objectives, sub-tasks, learning activities, criterion measurement.

"Began revising individualized units of instruction which I had developed before attending the institute--found ways to improve instructional techniques when using audio-tutorial methods.

"Made valuable individual contacts with English instructors at other schools who are enthusiastic about the systems approach. These contacts have led to not only a sharing of ideas about education, but an agreement to keep in touch and to share ideas and materials in the future.

"Received programed materials from individuals and the permission to take these materials with me and to adapt them for use in my classes at Central Piedmont.

"How I plan to implement improved instructional procedures during 1973-74.

"I will continue to develop instructional units which can be used on an individualized, self-paced basis.

continued...

"I will continue to support the development of [illegible] by providing facilities and help for students to [illegible]. By support, I mean in terms of materials and by opening [illegible] as part of my instructional [illegible]. [illegible]

"I plan to initiate a [illegible] project within the Communications Department by presenting a proposal to my department [illegible]. This project would aid [illegible] in writing more [illegible]

[illegible] (Travis W. [illegible] English)

"A beginning to understanding the origins of the world according to the Bantu system. This would [illegible] [illegible] a relatively new [illegible] [illegible] approach [illegible]

"In [illegible] I plan to [illegible] in my Communication Skills class, and to [illegible] [illegible] the [illegible] Library. Another [illegible] [illegible] I have additional [illegible] [illegible]

"During this [illegible] [illegible] a new [illegible] teaching technique. This [illegible] [illegible] [illegible]

one experimental section of individualized instruction modeled after Dr. Heider's program at Meramec."

-Stephen John (Chemistry)

"I was able to construct almost all of the material for modifying the approach to Unit I in Dr. Heider's materials. This unit will be reproduced and sent to each of the other chemistry participants for use or evaluation and comments. I have also become much, much more aware of the systems approach to teaching and without trying it I do feel more confident in it.

"I will be trying the materials prepared by Dr. Heider with a volunteer group and will of course try my own materials also. I will try developing materials for use in Geology studies for our spring semester."

-Ralph Jones (Chemistry)

"I learned how to organize a Business Education Office Simulation class at the community college level.

"I became familiar with the materials prepared by Mrs. Beverly Funk for a Simulated Homeowners Insurance Office and a Simulated Automobile Insurance Office.

"I also became acquainted with business teachers from a number of community colleges throughout the nation and had the opportunity to share ideas with them about what they are doing in their colleges to keep up to date and to do an effective job of teaching.

"I plan to write a proposal for a Simulated Homeowners Insurance Office for implementation in the curricula at Los Angeles City College.

"I have requested that sufficient materials be sent to LACC from the League for Innovation for starting such a class."

-Vauncille Jones (Business Education)

"I became acquainted with a new system of teaching secretaries. A system that is very complete and appears could be utilized to better train our students. I meet instructors from all over the country and have shared ideas on successful programs.

"The schedule has been planned for Fall 1973-74 and the system cannot be implemented now. Later I will introduce the system to our faculty and give them the opportunity to become acquainted with the program." -Ron Kiziah (Business Education)

"In this institute, I gained a thorough knowledge about the audio-tutorial system in teaching General Chemistry courses. Dr. Rudy Heider and our group of chemists enlarged my ideas and knowledge about the advantages of audio-tutorial system in chemistry.

"I gained an insight knowledge about the behavioral objectives and how to write behavioral objectives for a course. In the process, I also finished writing a unit (Organic Chemistry) for my General Chemistry course.

"During the Fall quarter of 1973, I propose to test these audio-tutorial units on a small batch of ten students from my General Chemistry course. If successful, I will be writing the audio scripts for other units in General Chemistry and test these units to the whole class. I might also write the same things for Advanced Organic Chemistry and General Biology course which I also teach. One problem I might face is about the "open lab" sessions because of a lack of facilities in our college."

-G. Krishnan (Chemistry)

"Gained. Descriptions of several systems approaches. Knowledge of goals, processes, and techniques of involving students in instruction via Keller Plan and others. Studied materials and procedures utilized by others of our group. Received support for my own innovative practices.

" Contributed. Description (written) of my own individual instruction courses. Newly completed research in Student Evaluation of Personalized Instruction in General Psychology at Mineral Area College. Description of my new T.V. course in General Psychology for Sept. 1973 using self study materials.

"To continue completely independent and self paced General Psychology, open end. In the classroom, institute Keller Plan of peer learning, etc., utilizing ILS materials. Produce "Sound On Slide" 35mm slides for supplementary use. Slies and sound discs already in hand. Record cassette lectures to accompany ILS materials to be available for independent study. (Ready now to tape). Will institute T.V. course in General Psychology beginning August 27, 1973, on independent study materials. T.V. presentations are audio-visual in nature, and not typical lecture presentations."

-Joe Landeau (Psychology)

"A clearer understanding of the systems approach in the total educa ion picture. Found many "traditional" teachers are having similar problems and are open to the systems approach.

"Exchanging ideas within the group brought forth excellent ideas.

"Fall quarter will be traditional teaching method because we are moving from our temporary campus to our permanent campus. With much confusion involved I do not think a new system would be beneficial to myself or the students.

"Winter quarter the implementation of the systems approach will begin. One lecture per week, one discussion group and then total individualization. The LRC will be the base of the tapes.

-Frank Loll (Psychology)

"Became more familiar with systems approach. Started planning to implement program in English for fall term. Wrote student handbook explaining system approach.

"Other Innovative Activities: Direct peer group counselling program. Students learn to counsel other students. Lead Support Groups in dormitory, work closely with faculty counsellors. Direct Community Service Education Program. Students work with inner-city or handicapped children or other persons of special need one day each week. This is a course, given for credit, students receive training one hour a week."

-Donna C. Maggi (English)

"I learned a better way for my teaching to be more effective through a systems approach. The most significant system I learned is how to individualize learning by: 1. Student involvement;..through use of hardware, films, filmstrips, overhead projector, recorders, etc;..unit instruction by which a student shall complete one unit before going on to next, all units are explained thoroughly with a system;.. feedback of each unit, better way to evaluate.

"1973-1974 school year. I expect to change my instruction by implementing the system approach that was described above. The most significant change will be the use of the unit method, whereby every student will go at his or her own rate-speed of learning. Student will be involved in all activities. I will adopt this new plan.

-Ernest J. Maio (Psychology)

"My project during the past two weeks was to develop performance objectives and criteria measures for one of my units in elementary algebra. I will develop the other units for the semester course in the coming weeks. The various group activities in our afternoon seminars have helped crystallized my thinking on how to best implement individualized instruction at my college. I plan to self-pace instruction allowing the student to choose from a variety of learning materials best suited for him to master the performance objectives."

-Gary I. Matulef (Mathematics)

"Because our school starts on August 22nd, I don't have much opportunity to contact my Division Head or my colleagues for major English changes in the immediate future. However, all our composition classes write a composition on the first day of class as one kind of diagnostic test toward placement where each student can achieve his best work.

"I have adapted Dr. Kepner's diagnostic test which is a composition with a special inspiration, have taped it so that it can be obtained in the learning center for late-comers. In my basic skills classes, the attendance is a problem due to athletic travel schedules as well as other causes. I plan to adapt my course so that it can go to the Learning Center on tape and in packages for those who have missed class and need to make up the work. With the feed-back from this experiment, I'll try to interest my colleagues; and by next semester I hope to have the individualized instruction worked out more thoroughly, package by package, to the students needs.

"Dr. Kepner's COMMUNICATION SKILLS STUDENT'S HANDBOOK is another idea I am adapting to Porterville College Basic Skills English Classes. It will outline the objectives of the course, the plan, attendance regulations, grading policy, and have a section about the Learning Center and the availability of tutors. This will be an interim handbook until I can develop more of the individualized instruction packages and can explore the ideas with my colleagues."

-Emily B. McCain (English)

"My accomplishments during this institute have been several: the establishment of new contacts in the educational field, both instructors and consultants; the intimate acquaintance established with the English instructional packages of Tom Kepner's; and at least the beginnings of an instructional sequence to suit the needs of transfer composition students (Kepner's program deals more principally with remedial work).

"During the 1973-74 year I hope to be able to implement improved instructional procedures by providing my colleagues in the appropriate area with Tom Kepner's materials. Further, I myself will be involved in developing packaged materials for at least one course and perhaps more during this year. And, finally, of course, I will be active in 'spreading the word' amongst others."

-Kathy Miles (English)

"Writing self-instructional unit on energy. It is about one-half finished at this time (August 17, 1973). It is a comprehensive discussion of the energy situation as it exists today, technical aspects of energy production at an introductory level, sources of energy for the future, and the advantages and hazards of nuclear fission reactors. The unit will be ready to use this semester in at least two different levels of chemistry classes this fall semester. I also hope it can be used as a self study energy primer for people in citizen's groups who need a foundation of information on which they can build.

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" This year for improved instruction: 1. Use of behavioral objectives in as many courses as I have time to prepare for them. 2. Use of the self-instructional unit I have prepared, along with one or two more by next semester. 3. Introduction of the self-instructional system in general chemistry using R. Heider's books during second semester."

-Clark F. Most, Jr. (Chemistry)

"Participation in this Institute has allowed me to examine critically my present personal teaching practices as well as the teaching practices of those teachers in my department. Many efforts to innovate in the teaching process have been tried by my fellow teachers an many of these efforts have gone unhearalded. This Institute has 'opened my eyes' to the need for concerted effort in the area of improving teaching. The Institute has made me aware of the value of teaching from formally stated 'Educational Objectives." I feel that I am now in a much better position to offer leadership in adopting and/or adapting packaged learning programs and systems which are available.

"I plan to restructure the courses I presently teach to include many of the ideas which have come from this Institute. I'm not willing at this point to endorse strict Individualized Instruction, but I am aware of the value of this mode and plan to approach its use in small steps. I plan to shift much of the responsibility of a student's learning program to the student with ample encouragement, help, and motivation coming from me. I plan to use formally stated Educational Objectives in my courses this next year whereas in years past these objectives have been evident only in my own mind. I plan to adopt a modified "Learning for Mastery" system in requiring at least a 70% score on quizzes for a minimum C grade. If scores are below the 70% mark 'repeat examinations' will be required with the agreement that the last try will become the recorded grade. I'm not equipped to try an 'open lab' program this coming year but as our building program progresses this will become a possibility."

-Richard G. O'Brien (Chemistry)

"During this institute I feel I accomplished a number of important things that contribute to my personal and professional growth: 1. I had the opportunity to exchange ideas on a variety of critical educational issues with professionals from widely separate geographical regions. The perspective of a rural midwest college teacher vs. a more cosmopolitan view from the west coast compared to my own eastern perspective was quite valuable. The problems we faced were not so very different, but approaches to resolutions were both stimulating and worthwhile. 2. I was able to work with a fellow institute participant on developing a systems approach to a course for slow learners in 'Personality' which would on the cognitive level be an overview of fundamentals of psychology and most importantly on the affective level would attempt to achieve the objective of the individual feeling good about himself - change in the direction of a positive self concept. Hopefully, within an academic setting he would have an opportunity for personal success - 'I <u>can</u> do it!' I think that in working through the rationale for the course and various learning activities I was able to synthesize concretely the major objectives of this institute. 3. I was able to receive some valuable feedback on the courses myself and my colleagues have developed in the last year. All courses at Brookdale utilize the systems approach and it was most helpful to receive comments and reactions from professionals outside of Brookdale. Some of the suggestions will provide good material for revision of some of the objectives and activities. 4. I was able to take the time to assess my position on a number of educational issues generated in the large group and small group sessions. 5. I feel that my commitment to students and their unique

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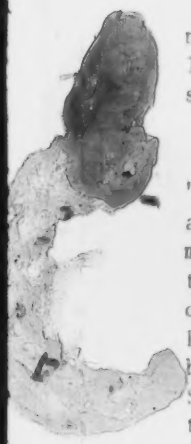

needs, especially disadvantaged students, has been revitalized and reinforced. I feel a kind of renewal - an enthusiasm to work ever harder for those whom I serve."

-Eugenia M. Parron (Psychology)

"I developed a new exciting program to use sta-ting in September, and I am excited about it. Most of the people in my group of psychologists were working on assignments in General Psychology. My needs were unique. I have been assigned to teaching three classes of Psychology 304. This course is a non-transferable course designed to help the underachiever who is usually also assigned to a remedial type English and reading (sometimes also math). The course is labeled as Personality, but it actually is a 'watered down' General Psychology class. These classes for September will be small (less than 15 in each). These students need most of all to feel good about themselves because they have had so many set backs all through life. The program design is set up to help develop a positive self concept in all students and also to help the students feel successful in an academic setting. All materials are self pacing with individual conferences weekly and two reinforcement sessions a week."

-Alicia Perez (Psychology)

"The institute was good for me because I accomplished the following: I met and shared ideas and methods of instruction with other teachers in composition and other fields; I was exposed to the systems approach of instruction and 'borrowed' heavily from it for my program; I developed a diagnostic test for entering Arapahoe students; and I became further aware of instructional language, such as terminal performance objections, enabling objects, etc.

"The 1973-'74 year will include part of the Lane Community College composition packet. I had to have my manual for my fall course to the printer by August 13, 1973, so I did most of my work last week. Now that part of Lane is already into my manual, I'll be able to program various students through various packages. Hopefully instruction will be improved (it should be the typing that's improved) by my new awareness of various techniques: pre-testing, better objectives, more individual instruction, etc."

-Sally L. Robbins (English)

"Will probably attempt to assimulate Bev Funk's office simulation for insurance. For those students who resist learning, this should be successful. Sounds exciting."

-Jennie Mae Rucker (Business)

"During this workshop I learned to write individualized instructional packages on the lines of behaviorial objectives. I completed two units and I plan to revise my other units which I wrote before. The technique used here was very beneficial. Morning session each day was most useful for general information. This workshop was really successful.

"I plan to start a completely self-paced program in algebra when I go back this Fall. I shall explain this approach to my other staff members and encourage them to follow the individualized instruction program.

-Surinder K. Sabharwal (Mathematics)

"I learned how to systematize individualized instruction during this institute. I plan to implement the curriculum I developed in basic composition during the 1973-1974 academic year.

"I will also be involved in discussing the systems approach to individualized instruction with the other faculty at Garrett. I don't know if there are other innovators in systems approach at my institution."

-Cassandra Sarah Schaefer (English)

"Gains from the institute; plans for an individualized system of Chemistry instruction, (includes plans for an open lab) all very much appreciated.

"Plans for implementation: I think we can use Dr. Heider's system of Chemistry instruction on about half of our General Chemistry students during the 1973-74 year."

-Chris Sheats Jr. (Chemistry)

"Accomplishment during the Institute: Learned what office simulation is like, both from the teacher's point of view and the student'spoint of view as we set up a "model office" for two days, in insurance. Taped all morning sessions and section sessions dealing with methods in office simulation, also the session wherein we all shared what we are doing in our departments in the way of innovations. I plan to share my printed and taped materials with the Del Mar faculty and administration by making them available in the library. One of the highlights here at Boulder has been hearing and sharing with other people our experiences at our various schools across the country.

"1973-74 Academic Year. Plan to present new course request to the curriculum committee, September 1973. Approval will depend on funding by TEA through cooperation of our Devision of Voc-Tech & Special Programs, since I am in the academic division funded by the TX Coordinating Board. We have a room allotted already and equipment available. We could begin Sept. '74 (because we have to publish new courses before they are offered).

"I am excited about office simulation having conceived the idea of offering it last Fall even though no TX Jr. Colleges had the class at that time. One had it this spring-Galveston Community College."

-Mrs. Juanita G. Sloan (Business Administration)

"For the first time since I heard of the systems approach, I gained an understanding of the concept and the implemention. I gained some actual experience in trying to write a package to teach transfer students the technique of writing a critical review.

"Normally I find it easier to work alone on projects; but after my frustrating attempt to develop a package-under the excellent guidance of Tom Kepner, I'm willing to admit that the writing of this type of material must be a cooperative endeavor. I'm almost willing to admit that I lack the talent to write this type of material, but I do have the ability to encourage others within my division to try the writing. I feel that because of Tom's thorough explanations and through my working with his packages, I could instruct others and could evaluate their products.

"A secondary accomplishment made possible by the institute was the forming of friendships with some interesting, talented people. Through this association I have a notebook full of ideas to share with my colleagues.

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"I also learned of some avenues open to the community college teacher for obtaining information, guidance, and possible materials.

"One way I'll implement improved procedures will be to try more audio-tutorial types of teaching this year. Winter quarter I intend to use Tom's packages from Lane, making some slight adaptations the first time around. I'll share this material with my colleagues who teach the same sections as I do. Also I will be one of the tutors staffing our new all-disciplines instructional center starting Fall quarter. My goal is to have as much packaged material in communications in the center as possible."

-Dorothy H. Stewart (English)

"Accomplishments during the Institute: 1. Important dialogues between colleagues as to how (methods) they teach psychology. 2. Dialogues with non-psychology teachers which gave me insights into some of the unique problems of other disciplines i.e., non-social science. 3. Conversation with institute members as to the kinds of innovative and non-innovative activities that are going on their campuses. 4. Involvement in special seminars, i.e., 'Working With Disadvantaged' by Dr. Mink, which will help me to try different tests and counselling strategies with the disadvantaged.

"Ways in which I plan to implement improved instructional procedures are as follows: 1. Write a clearer and more detailed description of my individualized systems course so that students at the beginning of registration may determine if this course is really for them. 2. Use tapes, slides, and other aids as supplementary materials to the Individual Learning Systems program. This I believe will be most beneficial to the disadvantaged students. 3. As Dr. Mink pointed out, I plan to make the first two-three weeks as success-oriented as possible. I feel that this is particularly important to the disadvantaged. 4. Plan to spend more in-class time with students as they work on their individual modules. In the past I think I have given too much responsibility to proctors, and waited for students to come to my office for assistance."

-Adolph C. Streng, Jr. (Psychology)

"I've redone five of the nine units for Developmental Mathematics - now they look like something. I'm sure the rest of them will look better now when I do them.

"In Fall, the class work will be basically transitional, but the students will be using the units I've made. They will be able to listen to tapes and read supplementary material. In Spring it will hopefully be a self-paced course - class time would be work sessions and tests would be given outside of class. Right now all the objectives are keyed to learning experiences, practice problems and post-tests. Next semester there will be pretests keyed to the objectives.

"I work with an auto-tutorial basic and intermediate algebra group. Along with two other instructors, meet students in group-work sessions once a week - we're there everyday with a different group, but students can come as amny times as they wish. I meet with each student (150) once a week to review material and I keep <u>all</u> records. I also assign retests and, if needed, give extensions on completion dates."

-Victoria B. Tauginas (Mathematics)

"I reviewed the Lane Community College material. I will adopt or adapt part of this material, and I will pass other materials to my colleagues. Specifically, I have begun to prepare a package of materials for very low level students. The purpose of this material will be to improve their self-concepts and their ability to expand on a generalization." -Karl K. Taylor (English)

"During the institute I worked in an individual manner toward the development of some expertise in self-paced instruction. I read, analyzed, and scavenged existing programs which were available. I have the beginning unit for a self-paced course outlined from rationale to objective to pretest to learning strategies to posttest, and I have plans for styles of recyling.

"I feel that the most important accomplishment has been the development of friendships which in the future will allow total exchange of programs in particular academic areas as well as cross-discipline areas.

"During the 1973-74 school year I plan to implement self-paced learning, using a variation of the Keller plan for proctors, in three courses - College Algebra, Calculus I and Calculus II. If time permits, Beginning Algebra will be analyzed in terms of performance objectives (by other members of the department) with the intention of self-pacing that course in 1974-75."

-Herbert L. Temple (Mathematics)

"I familiarized myself with the concept of individualized instruction and attempted to determine, in general, whether or not such a system would be feasible on the Pine Ridge Indian Reservation.

"Specifically, I examined the materials prepared by Dr. Heider and found his system on General Chemistry to be adaptable to our needs. By implementing this system for the 1973-1974 academic year, I would hope to persuade other members of our staff to examine the possibilities of taking a similar course of action in their respective fields."

-Tommy L. Tobin (Chemistry)

"I gained a knowledge of the concept 'Individualized Instruction.' I now know what the term means, how to structure course objectives, and how to implement this procedure. I should also add that the association and conversations with other instructors across the nation will certainly prove to be invaluable in the future.

"I plan to take a special group of about 10 students and put them on an individualized instruction program in introductory chemistry. It will be difficult to arrange for an open lab situation because we are in temporary building and many other disciplines utilize the lab."

-Gary Valentine (Chemistry)

"Wrote course objectives and course material for a 3 hour course in elementary algebra. I will try to implement the above course this fall at least on a trial basis. I plan to have the course in the winter schedule."

-James A. Verhanovitz (mathematics)

"The institute gave me time to study, discuss and think about avoiding some pitfalls in implementing my basic math program on a self-paced basis. I plan to work during the fall 1973-74 on writing objectives for my pretest and posttest for basic math so that I can start the self-pace program in the spring of 1974 semester.

I have developed sound-on-slide using the 3m machine for the complete course in basic math, whose contents cover the principles of arithmetic and elementary algebra. This is a one-semester course, the sound-on-slides will be a great help on a self-pace program. The sound-on-slide material was developed along the same lines as the text material that I have written for this course."

-John H. Watkins (Mathematics)

"Bakersfield College already has a self-paced modular open-entry open-exit self-instructional basic mathematics class and a learning Resource Center staffed with para-professionals. I want to improve the success ratio of students by implementing some of the innovative changes obtained from this workshop. Also, I hope to involve other teachers in this approach.

"Other Innovative Activities: Develop a 6 unit course for students with learning difficulties. This course will be a joint effort of the English and Mathematics Departments and will consist of a series of narrative modular packets designed to meet the students everyday needs. The students are disadvantaged (primarily Chicanos, Blacks, and low socio-economic whites) and have experienced little success in the past. (tentative starting date - Oct. 1973).

"Begin developing modular packets for other departments for recycling: nursing, Ind-Arts, food service, police and fire science, etc...(some packets complete in Spring 1974.) "

-Billie E. Williams (Mathematics)

"First of all, I made many new friends. The sharing of ideas and programs with these people was most rewarding. The general sessions were educational in all areas and most interesting. By evaluating all course objectives I hope to improve the success ratio, and to implement an office simulation program to meet the immediate needs of our adult students."

-Jessie M. Willams (Business Education)

"Learned the procedures for developing innovative material, problem solving and wrote one unit in math plus received units on various topics written by others. I plan to teach a course using materials developed by me and others."

-Annie L. Williamson (Math)

"I accomplished what I hope will be improved instructional systems incorporating mastery procedures. A system designed for use with the traditional closed quarter but with necessary use of 'in progress' grade reports. A system designed for use with an 'open entry - open exit' class.

"For '73-'74 school year I would plan to implement the first system mentioned above which I will summarize: systematized units of content including general and behavioral objectives, information input and sources and activities: systematized evaluation of student's involvement with above which includes objective and subjective feedback: emphasis of system is on the interaction between myself and my students on as close to a 'one to one' as I have time and energy for; at our school, our psychology is offered in three 11 week quarters, (terms?)"

-Donald J. Wilson (Psychology)

"During the institute I have completed about 1-1/2 units, 1/2 orientation to course and 1 - Basic Math. These will be implemented in the fall. Before Sept. 20, when classes start, I will have completed 3 units of my own and will implement these along with Rudy Heider's materials in my Chemical Technology course. For Rudy's materials I will work out study guides which will add to or subtract from what he has done in an attempt to make these fit my situation and style. I feel that the major accomplishments of the institute for me has been: 1. the allowance of enough time to develop materials and get an idea of my entire course outlay. Therefore, I will be able to have an individualized course in the Fall. 2. The exchange of ideas has given me some new techniques for student motivation (in particular - contract teaching and the money back guarantee). 3. I have worked out a good many practical problems which had been bothering me - paper work (how

to keep up?), actual scheduling, use of student proctors. 4. The recognition that we all share the same problems to one degree or another. 5. I have in addition to my units worked out: 1) a student evaluation sheet for instructional units; 2) an attendance form to be used in keeping up with those students who contract (student's responsibility); 3) an activity sheet to be used by myself and student proctors to keep up with what the students are doing.

"This fall I will be implementing my materials and Heider's materials in a chemistry course taught to chemical technicians. I hope it will be totally individualized; the student evaluation of each instructional unit: the use of attendance sheets, activity sheets, and contract teaching."

-Ann E. Womble (Chemistry)

"The institute provided exactly what was advertised. I feel confident about inaugurating an office simulation in spring '74. There are limited innovative acitivites at Delgado, however, I will expand on those which we do have later whe I return to my campus."

-John T. Wynn (Bussiness)

" What did I accomplish? I examined and evaluated instructional packages of several people, but three in depth. I determined that Tom Kepner's program will not meet the needs of my students (transfer English), but I gained insights into new strategies for teaching/learning and into ways to systematize instruction.

"I also examined portions of a package developed by Mrs. Herbert Temple, wife of a participant in the institute. Her package is most impressive and I have asked her to send the whole package for me to examine and hopefully use as supplementary materials for my students. Since she does not charge for the program's use in this manner, it is indeed 'cheap.'

"The greatest benefit of the institute for me has derived from the indepth, out-of-class exchanges between Irene Honeycutt and me. She asked me to evaluate instructional units she has developed for poetry. Our discussions have led to our grappling with teaching strategies, formulating and refining objectives, identifying what it is we actually want the students to learn, determining whether certain affective objectives should be graded or whether they should more suitably be ungraded (but measured) or whether those objectives should best be phrased as objectives for the instructor (re: establishing proper learning environments..). These discussions with Irene were beneficial because we were not talking abstractly; we were dealing with specific problems in a particular course, but the answers we arrived at often had implications for other courses too. Out of very honest, if demanding, interchanges, I feel that I more clearly understand how I can and should modify my own teaching. The discussions stimulated me to think freshly, creatively, about problems I have been struggling with for the past two years- particularly those relating to the question of how to wed systematic instruction with humanistic goals. And the discussions and sharing of materials has shown me the need for and value of honest, indepth evaluations among colleagues. Cursory examinations and evaluations are of little value to either the designer or the evaluator and certainly not to the student. Perhaps such sharing can only occur on a one-to-one basis or in a small group - of 3 - (where face-saving and ego loss do not become important) rather than in large groups.

"Another way in which I greatly benefited was in having my project work evaluated by someone outside my subject area. Dr. Hunter (Chemistry) worked with me as I

developed my project on English. He was able to see weaknesses that I believe an English instructor would have been too close to see.

"In terms of developing a system for my students--I have been working on an individualized approach to English 121--personal essay writing (1st quarter of college transfer English): a) specifying terminal performance objectives; b) specifying enabling objectives; c) specifying learning activities; d) specifying evaluative strategies.

"I am (merely trying to verbalize and systematize the course as I have been teaching it; one of the objectives being to identify and validate my approach. However, much more work needs to be done. I must refine all of the above, incorporate (identify) more enabling objectives and develop more learning activities to suit the individual needs of students. One of the final aims will be to produce a system which will enable the student to proceed at his own pace through the course; however, he will be required to have frequent contact with the instructor and/or students to receive feedback on his writing.

"During the 1973-74 academic year I intend to identify the complete set of terminal and enabling objectives, verbalize learning activities and construct measuring instruments. I hope to be able to produce all of these in some workable form as I teach the course this fall and to refine them in the winter and spring quarters. I will invest my time in adapting these for use with sections which are scheduled for one three-hour session per week, since I believe that structure has proved itself highly flexible and beneficial for English 121 (note that I am currently teaching a section on that schedule)."

-Peggy Zacharias (English)

"The innovation sessions have helped me to understand the Systems Approach and also in our small groups I have learned a lot of new techniques for teaching by listening to and talking with other instructors from many states. I am very excited about returning to our school with the many ideas and plans for a new year.

"I am supposed to give a report to our administration and faculty members on this two week session. At that time I hope to generate enthusiasm among the administration and faculty so they will also want to experiment in their classes with fresh ideas.

"This summer I was appointed as chairman for a faculty - student advisor committee. We have worked all summer writing a handbook for the faculty. I will hold a workshop for all the faculty and administration to explain our procedures, etc. At this time I will implement many things I have learned from these two weeks.

"At the present time our Dean and President are the main innovators at our college. There are 3 or 4 other members that are interested, but it is up to me in our meeting to motivate others. The administration is trying to develop new teaching techniques for our lecture classes, etc.

It would be helpful for us to visit other groups during the afternoon sessions. I would like to see another meeting next summer so we would be able to discuss the innovative activities we had tried in 1973-74.

"This was one of the most exciting and informative summers I have spent. I truly enjoyed every moment of it.

-Sarah M. Kennedy (Psychology)

PARTICIPANTS AND CONSULTANTS
TO THE BOULDER INSTITUTE
August 6-17, 1973

1. Willie M. Artis (Math)
4811 Easthaven Drive
Charlotte, NC 28212
Central Piedmont College
Charlotte, NC 28204

2. Mary L. Bacon (Business)
Rt. #2, Box 295
Somerset, Kentucky 42501
Somerset Community College
Somerset, Kentucky 42501

3. Bart B. Bare (Psychology)
Rt. #1, Box 90 AA
Boone, NC 28607
Caldwell Community College
Lenoir, NC 28045

4. Lois B. Bean (Business)
7040 16th Ave. NW
Seattle, WA 98107
Seattle Central Community College
Seattle, WA 98122

5. Barbara E. Beard (Business)
Rt. #1, Box 50 A-1
Williamsport, MD 21795
Hagerstown Junior College
Hagerstown, MD 21740

6. Carl M. Benjamin (Math)
3418 Christmas Tree Lane
Bakersfield, CA 93306
Bakersfield College
Bakersfield, CA 93305

7. Marcella W. Blechman (Business)
234 W. 64th Street
Inglewood, CA 90302
Los Angeles Southwest College
Los Angeles, CA 90047

8. James L. Brother (English)
7 Pondside Lane
West Simsbury, CT 06092
Hartford State Technical College
Hartford, CT 06106

9. Donald E. Dalrymple (Chemistry)
424 W. 12th
Trenton, MO 64683
Trenton Junior College
Trenton, MO 64683

10. John H. Doerr (Chemistry)
515 Breezy Lane
Wharton, TX 77488
Wharton County Junior College
Wharton, TX 77488

11. Mary H. Dudley (Psychology
2510 Lynn Drive
Big Spring, TX 79720
Howard County Junior College
Big Spring, TX 79720

12. Glenn R. Groenke (English)
618 Saguaro Drive
Tempe, AZ 85281
Scottsdale Junior College
Scottsdale, AZ 85281

13. Lucille M. Groenke (Math)
618 Saguaro Drive
Tempe, AZ 85281
Maricopa Technical College
Phoenix, AZ 85004

14. Adelle J. Gustafson (Business)
733 Bonita Drive
South Pasadena, CA 91030
Los Angeles Southwest College
Los Angeles, CA 90047

15. Ida L. Helms (Math)
4327 Castleton Rd.
Charlotte, NC 28211
Central Piedmont Community College
Charlotte, NC 28204

16. Michael J. Herrick (English)
99 Milford Pt. Rd.
Milford, CT 06460
Housatonic Community College
Bridgeport, CT 06608

17. Irene B. Honeycutt (English)
4411 Carventry Court
Charlotte, NC 28211
Central Piedmont Junior College
Charlotte, NC 28211

18. Julie Y. Hungar (English)
18213 Ballinger Way NE
Seattle, WA 98155
Seattle Central Community College
Seattle, WA 98122

19. Ann L. Jackson (Business)
P.O. Box 186
Mathiston, MS 39752
Wood Junior College
Mathiston, MS 39752

20. Curtis K. Jackson (Business)
415 N. 7th
Tonkawa, Oklahoma 74653
Northern Oklahoma College
Tonkawa, Oklahoma 74653

21. Ralph W. Jones (Chemistry)
404 Esibill Avenue
Millville, N.J. 08332
Cumberland County College
Vineland, N.J. 08360

22. Vauncille L. Jones (Business)
1155 N. Brand Blvd.
Glendale, CA 91202
Los Angeles City College
Los Angeles, CA 90029

23. Stephen W. John (Chemistry)
Rt. #8, Box 381 M
Pleasant Hill, Oregon 97401
Lane Community College
Eugene, Oregon 97405

24. Sarah M. Kennedy (Psychology)
1111 Bialock Rd., #96
Houston, TX 77055
South Texas Junior College
Houston, TX 77002

25. Ronald L. Kiziah (Business)
Rt. #2, Box 285-A
Hudson, NC 28638
Caldwell Community College
Lenoir, NC 28645

26. G. Krishnan (Chemistry)
411 Olive Street
Edwardsville, IL 62025
State Community College
East St. Louis, IL 62201

27. Joseph H. Landeau (Psychology)
Rt. #2
Farmington, MO 63640
Mineral Area College
Flat River, MO 63601

28. Frank S. Loll (Psychology)
Rt. #2
Robinson, IL 62454
Lincoln Trail College
Robinson, IL 62454

29. Donna C. Maggi (English)
207 David Drive, A-4
Bryn Mawr, PA 19010
Ellen Cushing Junior College
Bryn Mawr, PA 19010

30. Ernest J. Maio (Psychology)
260 Nona Ave.
Trinidad, CO 81082
Trinidad State Junior College
Trinidad, CO 81082

31. Gary I. Matulef (Math)
101 C. Dibb
China Lake, CA 93555
Cerro Coso Community College
Ridgecrest, CA

32. Emily B. McCain (English)
18546 Avenue 312
Visalia, CA 93277
Porterville College
Porterville, CA 93257

33. Kathy Miles (English)
964 S. Columbine
Denver, CO 80209
Community College of Denver
1250 Bannock
Denver, CO 80204

34. Clark F. Most, Jr. (Chemistry)
1909 S. Badour Rd.
Midland, Michigan 48640
Delta College
University Center, Mich. 48710

35. Richard G. O'Brien (Chemistry)
2466 Mi Casa Circle
Casa Grande, AZ 85222
Central Arizona College
Coolidge, AZ 85228

36. Eugenia M. Parron (Psychology)
87 Sunset Avenue
Red Bank, N.J. 07701
Brookdale Community College
Lincroft, N.J. 07738

37. Alicia Perez (Psychology)
175 Kush Lane
Corpus Christi, TX 78404
Del Mar College
Corpus Christi, TX 78404

38. Sally L. Robbins (English)
715 E. 4th Ave.
Denver, Colorado 80203
Arapahoe Community College
59 W.S. Santa Fe Drive
Littleton, CO 80120

39. Jennie Mae Rucker (Business)
3327 Gaylord Street
Denver, CO 80205
Auraria Community College
Denver, CO 80202

40. Surinder K. Sabharwal (Math)
2904 Pine Place
St. Louis, MO 63103
State Community College
E. St. Louis, IL 62201

41. Sandra S. Schweitzer (English)
Rt. #1
McHenry, MD 21541
Garrett Community College
McHenry, MD 21541

42. Christopher C. Sheats (Chemistry)
42107 Yosemite Drive
Greeley, CO 80631
Aims College
Greeley, CO 80631

43. Juanita G. Sloan (Business)
4501 Clearwater Drive
Corpus Christi, TX 78413
Del Mar College
Corpus Christi, TX 78404

44. Dorothy H. Stewart (English)
2623 Reservoir Rd.
Greeley, CO 80631
Aims College
Greeley, CO 80631

45. Adolph C. Streng, Jr. (Psychology)
711 Valiant Circle
Garland, TX 75401
Eastfield College
Mesquite, TX 75149

46. Karl K. Taylor (English)
208 S. Market
Washington, IL 61571
Illinois Central College
E. Peoria, IL 61611

47. Victoria B. Tauginas (Math)
1529 S. 49th Ct.
Cicero, IL 60650
Moraine Valley Community College
Palos Hills, IL 60465

48. Herbert L. Temple (Math)
3468 S. Perkins
Memphis, TN 38118
Shelby State Community College
Memphis, TN 38111

49. Tommy L. Tobin
Rt. #1
Winner, SD 57580
Lakota Higher Education Center
Pineridge, SD 57770

50. Gary W. Valentine (Chemistry)
19800 Marilla Street
Chatsworth, CA 91311
College of the Canyons
Valentia, CA 91355

51. James A. Verhanovitz (Math)
2070 Reppuhn
Bay City, Michigan 48706
Delta College
University Center, Mich 48710

52. John H. Watkins (Math)
18 Summit Drive
Farmington, MO 63640
Mineral Area College
Flat River, MO 63601

53. Billie E. Williams (Math)
3212 Century Drive
Bakersfield, CA 93306
Bakersfield College
Bakersfield, CA 93306

54. Jessie Williams (Business Education)
3212 Century Drive
Bakersfield CA 93306
Bakersfield Adult-Business Career Center
Bakersfield, CA 93301

55. Annie L. Williamson (Math)
5038 Wabada
St. Louis, MO 63113
Meramec Community College
St. Louis, MO 63122

56. Donald J. Wilson (Psychology)
Rt. #1, Box 94
Springfield, Oregon 97477
Lane Community College
Eugene, Oregon 97405

57. Ann E. Womble (Chemistry)
2413 Wade Hampton Blvd.
Greenville, SC 29607
Greenville Technical Education Center
Greenville, SC 29607

58. John T. Wynn (Business)
615 City Park Ave.
New Orleans, LA 70119
Delgado Junior College
New Orleans, LA 70119

59. Peggy A. Zacharias (English)
5601 S. Delaware
Littleton, CO 80120
Arapahoe Community College
5900 S. Santa Fe Dr.
Littleton, CO 80120

CONSULTANTS

1. Leahbeth Barnard (Assistant Director)
   6880 S. Adams Way
   Littleton, CO 80122
   Arapahoe Community College
   5900 S. Santa Fe Drive
   Littleton, CO 80120

2. Lorraine P. Dieudonné (Psychology)
   1118 Cuesta Drive
   Mountain View, CA 94040
   Foothill College
   12345 El Monte Dr.
   Los Altos Hills, CA 94022

3. Beverley M. Funk (Business)
   19815 10 NW
   Seattle, WA 98177
   Everett Community College
   801 Wetmore
   Everett, WA 98201

4. Rudolph L. Heider (Chemistry)
   61 Chaminade Dr.
   Creve Coeur, MO 63141
   Meramec Community College
   Kirkwood, MO 63122

5. Walter E. Hunter -- Director
   Rt. #2, Box 424, Schloettler
   Chesterfield, MO 63017
   Meramec Community College
   Kirkwood, MO 63122

6. Thomas A. Kepner (English)
   4790 Brookwood St.
   Eugene, Oregon 97405
   Instructional Development Division
   P.O.Box 1028
   Corvallis, Oregon 97330

7. Barbara Washburn (Math)
   1600 Concordia Ave.
   Austin, TX 78722
   Austin Community College
   901 Neal St.
   Austin, TX 78702

Introduction to the Evaluation Report

The institute evaluation report has been prepared by an outside evaluator. Mr. William Christensen was an advanced graduate student in Business at the University of Colorado, Boulder. The evaluator was recommended by Professor Thomas Shay at the University of Colorado. Mr. Christensen has had considerable education and experience in the areas of management, goal setting and evaluation.

As an evaluator for the institute Mr. Christensen developed and administered the survey materials, visited institute sessions, spoke informally with the participants and wrote the evaluation report. The evaluation report beginning on the next page is unedited.

INSTITUTE EVALUATION REPORT (IER)

This demographic profile and evaluation summary report is presented in four parts as follows:

Part I	Summary of Participant Demographic Information	Pages IER 2-5
Part II	Summary of Overall Evaluation of Institute	Pages IER 6-12
Part III	Summary of Evaluation of Morning General Session	Pages IER 13-22
Part IV	Summary of Evaluation of Primary Workshop Sessions	Pages IER 23-32

Each part is complete within itself including (unless otherwise indicated) the following:

a) Source -- Identification of and exhibit reference copy of instrument used for data acquisition.

b) Summary of Data -- Presentation of objective data in exhibit form and subjective (reaction data in narrative, item-summary form.

c) Evaluation Comments -- As needed to add to, amplify, clarify, or otherwise reflect on the evaluative information provided.

In considering the various evaluation segments, please note the changing significance of the different numerical ratings. Each rating series should be considered on its own merits, and not numerically compared directly with other series.

PART I: SUMMARY OF PARTICIPANT DEMOGRAPHIC INFORMATION

Source

Demographic information concerning each institute participant was obtained from the institute application form submitted by each participant.

Reference "Application for Admission to an Institute or Short-Term Training Program (Title V-E, P.L. 90-35, EPDA)," U.S. Dept. of H.E.W./O.E., Form No. 51-R0717.

Since no blank copies of the form were readily available, the attached Exhibit IA is a copy of a completed form selected at random, with principal personal data blanked out.

Summary of Data

See Exhibit IB attached.

Note that not all information from all lines/blanks of the form is presented. Those lines/blanks omitted represent data of such a highly personalized and/or a highly generalized nature as to be not applicable to this profile.

For further information and detail, refer to the complete file of applications as returned to Dr. Hunter.

Evaluatior Comments

The nature of such demographic data does not lend itself to meaningful comment.

The most significant institutional and individual demographic related data for purposes of this institute were implied in the criteria for institutional application and participant selection -- e.g. with respect to the "Community Colleges With High Minority Enrollments" portion of the institute designation.

The application form data reflected neither a) the relative minority enrollments of the various colleges represented, nor b) the minority representation on the institution's faculty/staff, nor c) the minority groups represented among the institute participants.

EXHIBIT 1A

Part I: Summary of Participant Demographic Information

APPLICATION FOR ADMISSION TO AN INSTITUTE OR SHORT-TERM TRAINING PROGRAM
(Title V-A, E.P. 89-329, as amended)

INSTRUCTIONS: PLEASE COMPLETE ALL ITEMS CAREFULLY AND RETURN TO THE DIRECTOR OF THE TRAINING PROGRAM. THE SPACES PROVIDED ARE NORMALLY SUFFICIENT. HOWEVER, IF SPACE IS INADEQUATE FOR ANY OF THE ITEMS, BEGIN ON THE FORM AND USING CORRESPONDING NUMBERS CONTINUE ON AN ADDITIONAL SHEET AND ATTACH TO THIS FORM.

1 NAME AND ADDRESS OF INSTITUTION TO WHICH YOU ARE APPLYING (CITY, STATE, AND ZIP CODE)	2 NAME OF PROGRAM
Meramec Community College 11333 Big Bend Blvd. Kirkwood, Missouri 63122 (314) 966-3400	Institute for Implementing a Systems Approach to Instruction Within Community Colleges With High Minority Enrollments
	3 DURATION (FROM) (MONTH, DAY, YEAR): August 5, 1973 (TO) (MONTH, DAY, YEAR): June 1, 1974 — NUMBER OF WEEKS: 2 | 2
4 NAME OF APPLICANT (LAST) (FIRST) (MIDDLE INITIAL)	5 SOCIAL SECURITY NUMBER — DATE OF BIRTH (MONTH, DAY, YEAR)
	6 SEX: ☐ MALE ☐ FEMALE — 7 MARITAL STATUS: ☒ MARRIED ☐ SINGLE
8 PERMANENT ADDRESS (STREET, CITY, STATE, AND ZIP CODE)	9 CURRENT ADDRESS (STREET, CITY, STATE, AND ZIP CODE) Same
10 HOME TELEPHONE: AREA CODE 609 NO.	OFFICE TELEPHONE: AREA CODE
11 [illegible]	
12 NAME AND ADDRESS (STREET, CITY, STATE, AND ZIP CODE) OF INSTITUTION (OR BUSINESS, AGENCY OR OTHER ORGANIZATION) WHERE YOU ARE NOW X EMPLOYED OR ATTENDING Cumberland County College, Box #517, Vineland, N. J. 08360	
TITLE OF PRESENT POSITION Assistant Professor	THE ABOVE-NAMED INSTITUTION IS ☐ OTHER (SPECIFY) X PUBLIC ☐ PRIVATE X 2-YEAR ☐ 4-YEAR
13 NAME AND ADDRESS (CITY, STATE, AND ZIP CODE) OF INSTITUTION WHERE YOU EXPECT TO BE EMPLOYED IMMEDIATELY AFTER THE PROPOSED TRAINING PROGRAM Same	
TITLE OF POSITION YOU WILL HOLD Same	THE ABOVE-NAMED INSTITUTION IS ☐ OTHER (SPECIFY) ☒ PUBLIC ☐ PRIVATE ☒ 2-YEAR ☐ 4-YEAR
14 IF SELECTED FOR THE PROGRAM, DO YOU PLAN TO WORK FOR A DEGREE? ☐ YES ☒ NO IF "YES," SPECIFY TITLE OF DEGREE	

15 COLLEGES AND UNIVERSITIES YOU HAVE ATTENDED

NAME OF INSTITUTION	DEGREE AWARDED	MAJOR	MINOR	DATES ATTENDED FROM	TO
Univ. of Penna.	--	Mech. Engineer	--	1946	1948
Temple University	B.Ed.	Science	Math	1950	1952
Temple University	M.Ed.	Sec. Ed.	Science	1952	1957

16 SUMMARIZE YOUR YEARS OF EXPERIENCE IN TEACHING, EDUCATIONAL ADMINISTRATION OR OTHER RELATED WORK

SUBJECTS OR ASSIGNMENTS	LEVEL	YEARS OF EXPERIENCE	SUBJECT OR ASSIGNMENTS	LEVEL	YEARS OF EXPERIENCE
Chemistry	HS	3	Physics	Jr.Coll.	4
Math	HS	4	Geology	Jr.Coll.	2
Physics	HS	17	Math	Jr.Coll.	1
Dept. Chairman	HS	2	Physical Science	Jr.Coll.	2

UE 1186, 1-69

"A "FULL-TIME" WEEK IS 5 CONSECUTIVE FULL DAYS OF WORKLOAD.

IER-4

17 EMPLOYMENT RECORD--LIST YOUR PLACES OF EMPLOYMENT IN TEACHING, EDUCATIONAL ADMINISTRATION OR OTHER RELATED WORK DURING THE LAST 5 YEARS. (START WITH YOUR PRESENT OR LAST POSITION AND WORK BACK.)

DATES	NAME AND ADDRESS OF EMPLOYER	NATURE OF YOUR DUTIES
1969 - Present	Cumberland County College Vineland, New Jersey	Assistant Professor
1967 1969	Woodstown High School Woodstown, N. J.	Science Teacher Department Chairman
Summers 1964-1971	South Dakota School of Mines & Tech., Rapid City, S. D.	NSF Institute Instructor PSSC - Physics

18 LIST ANY ADDITIONAL SIGNIFICANT PROFESSIONAL OR ACADEMIC EXPERIENCES YOU HAVE HAD THAT RELATE TO THIS TRAINING PROGRAM. INCLUDE INSTITUTES, WORKSHOPS, SEMINARS, CONFERENCES, ETC.

NATURE OF PROGRAM	SPONSORING INSTITUTION (OR AGENCY)	DATE
(1) PSSC Physics Project One of first public school teachers to use the material in New Jersey.	N.S.F. Institute	1958
(2) Taught PSSC Program in NSF Institutes at Univ. of Colorado (3 yrs.) and South Dakota School of Mines and Technology (7 yrs.)	N.S.F.	1960 to 1971

19 GIVE NAME, ADDRESS, AND TITLE OF YOUR IMMEDIATE SUPERVISOR, DEPARTMENT CHAIRMAN, DEAN OR OTHER OFFICIAL

NAME

TITLE
Dean of Instruction

ADDRESS
Cumberland County College
P. O. Box #517
Vineland, New Jersey 08360

20 I PLAN TO APPLY THE BENEFITS DERIVED FROM THIS PROGRAM TO MY LONG-RANGE PROFESSIONAL CAREER PLANS IN HIGHER EDUCATION AS FOLLOWS:

We are beginning to apply the systems approach to our educational programs. I have been assigned to teach the General Chemistry classes and will be able to make immediate application of the benefits to this work. Then, the experience gained can be applied to my classes in Geology that I introduced two years ago as a new offering in our school.

21 WILL LIVE IN THE INSTITUTION'S HOUSING FACILITIES IF AVAILABLE: X YES ☐ NO | WITH MY SPOUSE: X YES ☐ NO

AND CHILDREN: ☐ YES X NO (IF CHILDREN WILL ACCOMPANY YOU, COMPLETE THE FOLLOWING)

NAME OF CHILD	AGE	SEX

HOUSING ARRANGEMENTS YOU PREFER

We would be bringing a self-contained travel trailer that could be used for living if necessary.

SIGNATURE

DATE
6/20/73

EXHIBIT IB

Part I: Summary of Participant Demographic Information

	No. (59)	%
Line 6: Sex		
Male	31	52
Female	28	48
Line 7: Marital Status		
Married	48	81
Single	10	17
NR (No Response)	1	2
Line 11: I Am Now (-----) An Institution of Higher Education		
Serving In	58	98
Preparing To Serve In	0	0
NR	1	1
Line 12b: Title of Present Position		
Instructor	38	64
Associate Professor	10	17
Assistant Professor	9	16
Other	2	3
Line 12c: The Above Named Institution Is		
i) Public	45	76
Private	4	7
NR	10	17
ii) 2 Year	54	92
4 Year	0	0
NR	5	8
Line 14: Do You Plan to Work For A Degree		
Yes	14	24
No	44	75
NR	1	1
Line 15: Highest Degree Currently Attained (Colleges and Universities You Have Attended)		
PhD/EdD	3	5
MA/MS	49	83
BA/BS	5	8
NR	2	3

Line 16/17: Experience In Teaching/Employment Record

Level/Year Service	0-2	3-5	6-9	10+
Community Jr. College	11	24	11	4
Jr./Sr. High School	11	8	6	6
Other	5	11	1	0

(# of respondents shown for each cell)

PART II: SUMMARY OF OVERALL EVALUATION OF INSTITUTE

Source

At the closing general session of the institute on Friday morning August 17, each participant was asked to complete a standard EPDA comprehensive evaluation form.

Reference "Participant Information and Evaluation (Institutes, Short-Term Training Programs, and Special Projects Under Part E of the Education Professions Development Act)," U.S. Dept of H.E.W./O.E., Form No. 51-R0847.

Exhibit IIA attached represents the evaluation portion of that form, "Section B: Evaluation of Training Program (pages 3,4)."

Summary of Data

See Exhibit IIB for objective data from lines 18-23.

See Exhibit IIC for a summary of the comments provided by the participants under lines 24-26. In presenting this summary, participant comments have been interpreted, edited, and thereby grouped and tallied. Comments specific to individual sessions have been omitted and left to the various session evaluations. Other comments believed superflous and/or otherwise non-contributory to the evaluation have also been edited out.

For further information and detail, refer to the complete file of overall evaluations as returned to Dr. Hunter.

Evaluator Comments

The various issues and points raised in the above reflect all of the significant reactions received throughout the institute by the evaluator in informal discussion with many of the institute participants.

EXHIBIT IIA

Part II: Summary of Overall Evaluation of Institute

SECTION B. EVALUATION OF TRAINING PROGRAM

18. RATE THE OVERALL QUALITY OF THE TRAINING PROGRAM

(1) ☐ AN OUTSTANDING PROGRAM
(2) ☐ VERY GOOD
(3) ☐ GOOD
(4) ☐ ADEQUATE
(5) ☐ POOR

19. HOW USEFUL WILL THE TRAINING RECEIVED IN THIS PROGRAM BE TO YOU IN YOUR PROFESSIONAL WORK?

(1) ☐ VERY USEFUL
(2) ☐ FAIRLY USEFUL
(3) ☐ NOT AT ALL USEFUL
(4) ☐ DON'T KNOW

20. INDICATE WHICH AREA OF FOCUS IN THE TRAINING PROGRAM WAS OF PRIMARY VALUE TO YOU IN YOUR PROFESSIONAL DEVELOPMENT BY MARKING THE FOLLOWING (Mark a "1" by the area of greatest value, a "2" by the second most valuable area, etc. Place NA by any area which is not applicable.)

(A) _____ CONTENT (Learning in field of specialization or discipline)
(B) _____ ATTITUDE CHANGE (Social sensitivity, philosophy, etc.)
(C) _____ METHODOLOGY (Including skills development)
(D) _____ COMMUNICATION (Understanding and communicating more effectively with others)

21. THE LEVEL OF THE TRAINING PROGRAM IN TERMS OF BACKGROUND EXPERIENCE AND COMPETENCE

(1) ☐ WAS OVER MY HEAD
(2) ☐ INTEGRATED WITH MY PREVIOUS BACKGROUND AND EXPERIENCE
(3) ☐ COVERED INFORMATION WITH WHICH I WAS ALREADY FAMILIAR

22. RATE THE FOLLOWING CHARACTERISTICS OF THE TRAINING PROGRAM BY USING THE FOLLOWING RATING SCALE

1 -- Outstanding
2 -- Very good
3 -- Good
4 -- Adequate
5 -- Poor

(Place the number which best fits your response by each characteristic listed. Place NA by any characteristic which is not applicable)

(A) _____ QUALITY OF CURRICULUM
(B) _____ QUALITY OF INTERNSHIP EXPERIENCE, PRACTICUM, OR FIELD WORK (If applicable)
(C) _____ ADMINISTRATIVE ARRANGEMENTS – QUALITY OF LEARNING ATMOSPHERE CREATED
(D) _____ ADMINISTRATIVE ARRANGEMENTS – EFFECTIVENESS OF TIME SCHEDULE OF ACTIVITIES
(E) _____ QUALITY OF FULL TIME TEACHING STAFF
(F) _____ QUALITY OF PART-TIME TEACHING STAFF
(G) _____ QUALITY OF CONSULTANTS
(H) _____ USEFULNESS OF LABORATORY SESSIONS (If applicable)
(I) _____ QUALITY OF INSTRUCTIONAL FACILITIES
(J) _____ LIVING-DINING FACILITIES
(K) _____ RAPPORT AMONG PARTICIPANTS
(L) _____ ADMINISTRATION-FACULTY-PARTICIPANT RAPPORT
(M) _____ CRITERIA FOR SELECTION OF PARTICIPANTS
(N) _____ PROVISION FOR FOLLOW-UP ON PARTICIPANTS AFTER COMPLETION OF TRAINING PROGRAM
(O) _____ OTHER (Specify) _____

23. THE LENGTH OF THE PROGRAM WAS

(1) ☐ TOO LONG
(2) ☐ TOO SHORT
(3) ☐ ABOUT THE RIGHT LENGTH

24. DISCUSS YOUR PERCEPTIONS OF THE MAJOR STRENGTHS AND WEAKNESSES OF THE TRAINING PROGRAM

STRENGTHS	WEAKNESSES

25. IDENTIFY SPECIFIC CHANGES YOU WOULD LIKE TO SEE IF THE PROGRAM WERE TO CONTINUE

26. IN THE SPACE BELOW, STATE BRIEFLY YOUR CAREER PLANS IN HIGHER EDUCATION. INDICATE ANY RECENT CHANGES IN THESE PLANS. IF THIS PROGRAM ENHANCED YOUR CAREER DEVELOPMENT SUFFICIENTLY TO JUSTIFY THE TIME THAT YOU DEVOTED TO IT, EXPLAIN HOW.

EXHIBIT IIB

Part II: Summary of Overall Evaluation of Institute--Objective

(46 Forms Returned from 59 Participants)

	No.(46)	%
Line 18: Overall Quality		
1) Outstanding	26	57
2) Very Good	20	43
3) Good		
4) Adequate		
5) Poor		
Average Rating = 1.45/5.00		
Line 19: How Useful In Work		
1) Very Useful	41	89
2) Fairly Useful	5	11
3) Not At All Useful		
4) Don't Know		
Average Rating = 1.11/5.00		
Line 21: Level of Training		
1) Over My Head	0	0
2) Integrated With Background/Experience	44	98
3) Information Already Familier	1	1
NR(No Response)		
Average Rating = 2.02/3.00		
Line 23: Length of Program		
1) Too Long	5	11
2) Too Short	7	15
3) About Right Length	30	65
NR	4	9
Average Rating = 2.60/3.00		

Line 20: Area of Focus of Primary Value

Instructions = Rank A-B-C-D in 1-(Most Value)-2-3-4 Order

Area of Focus/Rank	1	2	3	4	NA	Ave. Rank
A) Content	10	15	3	7	3	2.20
B) Attitude Change	7	3	10	9	5	2.72
C) Methodology	22	11	15	2	0	1.67
D) Communication	3	10	13	7	2	2.73

(# of responses shown for each cell)

Line 22: Rating of Institute Characteristics

Instructions: Rate each characteristic A-O on a scale of 1 (Outstanding), 2(Very Good), 3(Good), 4(Adequate), 5(Poor)

Characteristic/Rating	1	2	3	4	5	NA	Ave.
A) Q of Curriculum	18	21	4	1		1	1.73
B) Q of Internship Experience	14	11	5			10	1.70
C) Q of Learning Atmosphere	21	19	2	1	1		1.23
D) Effectiveness of Schedule	14	19	9	1	1	13	2.00
E) Q of Full Time Staff	18	10	1	1		13	1.50
F) Q of Part Time Staff	8	9	2	1			1.80
G) Q of Consultants	26	16	1		1	7	1.35
H) Usefulness of Lab Sessions	15	10	3		1	1	1.69
I) Q of Instruc. Facilities	16	14	9	2	1	3	2.00
J) Living-Dining Facilities	19	15	3	2	1		1.77
K) Rapport Among Partic.	29	12	3		1	1	1.49
L) Adm.-Fac.-Part. Rapport	28	13	1	1	1	8	1.50
M) Criteria for Part. Selection	13	13	7		1	3	1.91
N) Provision for Followup	10	20	3	2	1	2	2.50
O) Other							

(Q = Quality) (# of responses shown for each cell)

EXHIBIT IIC

Part II: Summary of Overall Evaluation of Institute -- Comments

Line 24: Discuss your perceptions of the major strengths and weaknesses of the programs.

Strengths

Quality of consultants --
- Expertise as to content and methodology
- Interaction with participants on group and individual basis
- Effective one-to-one contact for learning and unit development

Quality of overall institute
- Sharing of ideas and materials with consultants and with other participants
- Exposure to varied approaches to individualization
- Combination of group and individual work--direct participation
- Development of own materials with guidance
- Practical application of concepts
- Projected followup if it develops

Leadership and facilities
- Director and Assistant Director leadership and assistance
- Location and facilities
- Social activities -- planned and informal

Weaknesses

Communication and confusion prior to and at start of institute concerning overall purpose and objectives, intended emphasis and activities, logistics and mechanics.

Too short a time for further design and implementation before start of fall term.

Lack of adequate emphasis on working with minority and disadvantaged students.

Morning sessions not always relevant; some overemphasis on administration.

Poor AV mechanically and techniques of utilization.

Line 25: Identify specific changes you would like to see if the program were to continue.

More and better information prior to institute -- what willbe done and what will be expected of participants.

More on working with minority, underachievers, and other disadvantaged students.

Follow-up institute next summer to compare progress and extend learning to phase two--also followup as already projected.

Field trip to innovative community college now using sophisticated methodology, materials, media in individualized instruction.

Miscellaneous other--

Sessions on media development and use
Sessions on human development aspects of individualization
Better selectivity of participants as to positive attitudes
Another week at least

Line 26: Briefly state your career plans. If this program jusitified your time input in that regard, explain how.

Remain an instructor and develop/implement more effective programs of individualization in my emphasis areas.

Administratively foster development of wider range of courses along the self-paced, individualized format.

Useful as input to planned advanced degree work.

Generally opened up new avenues to meaningful instruction and showed feasibility of individualization for essentially any content area and for variety of student capabilities and interests.

PART III: SUMMARY OF EVALUATION OF MORNING GENERAL SESSIONS

Source

Following each of the eight morning general topic sessions, each participant was asked to complete a session evaluation instrument. These instruments were distributed daily, to be collected the following day or later in the institute.

Reference attached Exhibit IIIA "Conference Evaluation Report--Form A: Daily Morning Sessions."

Summary of Data

See Exhibit IIIB for objective data for each instrument section I, II relative to each session.

See Exhibit IIIC for a summary of the comments provided by the participants for each instrument section I, II, III relative to each session.

For further information and detail, refer to the complete files of evaluations for each session, as returned to Dr. Hunter.

Evaluator Comments

The various comments presented in the summaries reflect all of the significant reactions received throughout the institute by the evaluator in informal discussion with many of the institute participants.

Note that the actual schedule of speakers does not coincide completely with the listing on page A-2 of Exhibit IIIA. This due to several schedule changes which became necessary after the forms were printed. The session identification as listed in Exhibits III B,C are correct.

EXHIBIT IIIA

Part III: Summary of Evaluation of Morning General Sessions

CONFERENCE EVALUATION REPORT

FORM A: Daily Morning Topic Sessions

I. GENERAL EVALUATION OF SESSION

Rating Scale:
1 = Not At All / Definitely Not
2 = Occasionally / Not Very
3 = Usually / More or Less
4 = Often / Pretty Much
5 = Always / Definitely Yes

a. were the objectives of the session made clear to you? 1 2 3 4 5

b. Did the content of the session meet the session objectives as you understood them? 1 2 3 4 5

c. Were the materials used and provided to you up-to-date, pertinent, and applicable? 1 2 3 4 5

d. Was the session worthwhile to you for your needs with respect to curriculum design? 1 2 3 4 5

e. Did the session meet your overall expectations? 1 2 3 4 5

f. Did the content of this session fit well with your overall view of the total conference? 1 2 3 4 5

g. Comments about the session content:

_____

_____

_____

_____

_____

II. GENERAL EVALUATION OF CONSULTANT

Rating Scale:
1 = Not At All / Definitely Not
2 = Occasionally / Not Very
3 = Usually / More or Less
4 = Often / Pretty Much
5 = Always / Definitely Yes

The Consultant --

a. Was very knowledgeable and well prepared for the topic. 1 2 3 4 5

b. Expressed principles, concepts, ideas, clearly and understandably. 1 2 3 4 5

c. Presented the material in a well organized manner. 1 2 3 4 5

d. Presented the material in an interesting fashion. 1 2 3 4 5

e. Invited questions, comments, discussion of the material and of his ideas. 1 2 3 4 5

f. Discussed points of view other than his own. 1 2 3 4 5

g. Comments about the consultant's presentation:

_____

_____

_____

_____

SESSION IDENTIFICATION

____	Tues.	8/7	Mastery Learning	Dr. Hunter
____	Wed.	8/8	Behavorial Objectives	Dr. Washburn
____	Thur.	8/9	Criterion Reference Evaluation	Dr. Washburn
____	Fri.	8/10	Alternate Learning Procedures	Dr. Hunter
____	Mon.	8/13	Measuring Effectiveness	Dr. Romine
____	Tues.	8/14	Dissemination of Systems	Dr. Urbach
____	Wed.	8/15	Consortia and Exchange	Dr. Howe
____	Thur.	8/16	Resource Allocation	Dr. Shay

III. STRENGTHS AND WEAKNESSES OF THE SESSION
Via "CRITICAL INCIDENTS" ANALYSIS

Please identify no more than two (2) each positive (+) and negative (-) "critical incidents" which you believe significantly added to (+) or detracted from (-) the value of this session for you and for your overall benefit from the session and the conference.

a. What was the incident, situation, occurance, etc.?

b. Why do you feel it was particularly (+) or (-)?

c. Were there any specific and/or unusual conditions which may have led to this incident?

d. What would you suggest doing about it in a future session of this type -- e.g. how could it be capitalized on if (+), or how could it be avoided if (-)?

#1 (+) _____

_____

_____

#2 (+) _____

_____

_____

#1 (-) _____

_____

_____

#2 (-) _____

_____

_____

EXHIBIT III B

PART III : SUMMARY OF EVALUATION OF GENERAL MORNING SESSIONS -- OBJECTIVE

	HUNTER Tues - 8/7 MASTERY	WASHBURN WED - 8/8 OBJECTIVES	HUNTER THUR - 8/9 ALTERNATIVE	WASHBURN FRI - 8/10 CRITERION
No. OF RETURNS	46	39	38	29
I SESSION EVALUATION				
a. OBJECTIVES	3.80	3.53	4.00	3.83
b. CONTENT	3.95	3.51	4.13	3.65
c. MATERIALS	4.37	3.94	4.19	3.86
d. WORTHWHILE	3.74	3.52	3.92	3.50
e. EXPECTATIONS	3.80	3.07	4.13	3.45
f. VS. CONFERENCE	4.22	3.50	4.21	3.54
II CONSULTANT EVALUATION				
a. PREPARATION	4.44	4.24	4.55	4.10
b. CLARITY	4.50	3.62	4.47	3.89
c. ORGANIZATION	4.55	3.80	4.42	3.93
d. INTEREST	4.00	3.64	4.13	3.78
e. DISCUSSION	4.40	3.76	4.08	3.75
f. POINTS OF VIEW	3.79	3.24	4.03	3.44

	KEPNER Mon - 8/14 SYSTEMS	ROMINE Tues - 8/14 EFFECTIVENESS	HOWE WED - 8/15 CONSORTIM	SHAY THUR - 8/16 RESOURCE
No. OF RETURNS	32	34	35	28
I SESSION EVALUATION				
a OBJECTIVES	2.97	4.62	3.26	4.50
b CONTENT	3.56	4.80	3.03	4.32
c MATERIALS	3.96	4.80	3.45	4.54
d WORTHWHILE	3.31	4.39	3.44	3.67
e. EXPECTATIONS	3.46	4.50	2.29	3.93
f VS. CONFERENCE	3.53	4.47	3.52	3.79
II CONSULTANT EVALUATION				
a PREPARATION	4.10	4.88	3.81	4.70
b. CLARITY	3.97	4.68	3.24	4.73
c ORGANIZATION	3.58	4.74	2.99	4.21
d INTEREST	3.84	4.59	3.69	4.35
e. DISCUSSION	3.45	4.59	3.03	3.54
f. POINTS OF VIEW	3.28	4.42	2.50	4.36

EXHIBIT-IIIC

Part III: Summary of Evaluation of Morning General Sessions -- Comments

Reference

I-g General Evaluation of Session -- Comments About the Session Content

II-g General Evaluation of Consultant -- Comments About the Consultant's Presentation

III Strengths and Weaknesses of the Session via "Critical Incidents" Analysis

Hunter -- 8/7 -- Mastery Learning Concepts

I-g Content

Generally a good session on a valuable topic. In view of prior knowledge and available handout, perhaps too much a summary and not enough added depth and applicability.

Slide information a useful supplement, but needed more explanation and perhaps handouts.

Discussion useful but much too limited for such a primary topic.

II-g Consultant

Personable, organized, knowledgeable, low-key but effective.

Good use of visuals, inspite of AV problems.

Most comments revolved around discussion -- not nearly enough, lack of focal issues, limited response to questions.

III Positive Incidents

Projected materials to augment basic topic.

Points made about applicability of concept to varied student capabilities and expectancies.

Basic topic as general introduction to institute efforts.

Aspect of challenge for teachers to apply the concept.

III Negative Incidents

AV equipment -- mechanical and sequencing.

General initial confusion still extant concerning institute purpose, direction, structure.

Too much a summary; not enough explanation and in-depth amplification.

Washburn--8/8 -- Behavorial Objectives/A New Look

I-g Content

Generally mixed reactions, almost to extremes. Average seemed to be of potential value but not realized due to problems with lack of time to implement and with group dynamics.

Confusion among session purpose and objectives, presentation and group involvement technique, relation to overall institute.

II-g Consultant

Too negative factor oriented.

A lot of good ideas, but had trouble getting this session across and going.

III Positive Incidents

Triad group technique and activity -- in spite of the problems with it.

Focus on self analysis and need to consider relationship of self to group.

Challenge of putting learning theory into real practice.

III Negative Incidents

Lack of adequate objectives, direction, time.

Obvious disinterest and negativism of some participants--didn't give the session a chance.

Discontinuity of large to small group shifts, with resulting noise and confusion.

Hunter -- 8/9 Alternative Learning Activities

I-g Content

Interesting, informative, pertinent, useful.

Good basic content, but could have used greater depth.

Discussion useful, but again too limited.

Sources valuable, but need identification for future reference.

II-g Consultant
Good again, but needs to speak more forcefully.

Heavy on slide lecture, and light on discussion involvement.

Good participant rapport, when he takes time to use it.

III Positive Incidents
Content and use of visuals.

Sharing of personal philosophy and practical experiences.

Efficient use of otherwise too little discussion time.

III Negative Incidents
Too fast to take adequate notes.

Generally too superficial.

Washburn -- 8/10 -- Criterion Referenced Evaluation

I-g Content
Widely varied reactions, and again almost to extremes as for 8/8 sessions.

II-g Consultant
Participants seem either turned on or turned off by Dr. Washburn and her techniques (methodology, personalities, receptivity?)

Almost a repeat of comments from 8/8.

III Positive Incidents
Involvement difficult to cope with but effective.

Direct involvement with criterion objectives.

III Negative Incidents
No clear cut, meaningful negative comments.

Kepner -- 8/13 -- Dissemination of Instructional Systems

I-g Content
Apparent good potential, but session seemed more devoted to the organization than the educational concepts.

Perhaps of more value to some participants, less to others.

II-g Consultant
Generally interesting, but never really hit home.

Too "I" oriented -- what of the subject content and its value to instruction.

III Positive Incidents
A new possible source for innovative educational techniques and assistance.

Interesting change-of-pace.

III Negative Incidents
Pacing was distracting, and perhaps too casual and off-hand in approach.

Commercial emphasis misplaced.

Romine -- 8/14 -- Measuring Effectiveness

I-g Content
Generally the most valuable morning session so far -- interesting, stimulating, useful, relevant.

Both a concept and a technique for development and implementation.

II-g Consultant
Excellent!

Professional presentation -- solid content, involving delivery, human approach.

III Positive Incidents
The whole presentation!

Poem added human dimension and teacher challenge.

Handouts.

III Negative Incidents
Statistical information not clearly explained.

Lack of time to review materials and discuss them and presentation.

Howe -- 8/15 -- Consortia and Exchange

I-g Content

Generally interesting enough, but not directly pertinent to focus of institute.

Worthwhile coverage of nature of consortia and involvement in fostering new approaches to education.

II-g Consultant

Mixed reactions to consultant as to content.

Reading of material detracted and perhaps countered most potential value.

III Positive Incidents

Slide presentation interesting.

Concept of League and its activities.

III Negative Incidents

Reading of material.

AV equipment problems.

Apparent canned presentation and League commercial.

Shav -- 8/16 -- Resource Allocation

I-g Content

Interesting, informative, current, vital, challenging.

Useful adjunct in considering how to approach the needs for innovative programs.

II-g Consultant

Professional presentation of an uncomfortable topic for most teachers.

Dealt clearly and concisely with the key issues.

III Positive Incidents

Relevant materials and usage of them.

Practical aspects and interpretations emphasized.

III Negative Incidents

Once again, too little discussion time.

Left feeling of futility ---- what can those at teacher level do to influence and implement.

PART IV: SUMMARY OF EVALUATION OF PRIMARY WORKSHOP SESSIONS

Source

At the end of each week's workshop sessions (Friday 8/10 and Thursday 8/16), each participant in each of the five area workshop groups was asked to complete a group/session evaluation instrument covering the week's activities.

Reference attached Exhibit IV A "Conference Evaluation Report -- Form B: Weekly Evaluation of Daily Morning/Afternoon Workshop Sessions."

Summary of Data

See Exhibit IV B for objective data for each instrument section I, II, III relative to each group and for each week.

See Exhibit IVC for a summary of the comments provided by the participants for each instrument section I, II, III, IV relative to each group and for each week.

For further information and detail, refer to the evaluator worksheets as returned to Dr. Hunter. The completed sets of actual evaluation forms for each group were sent the the respective group consultants.

Evaluator Comments

The various comments presented in the summaries reflect all of the significant reactions received throughout the institute by the evaluator in informal discussion with many of the institute participants.

Further, some comments pertinent to particular area workshop groups and individual consultants, but presented in the overall institute evaluation instrument (See Part II), have been reflected here as applicable.

EXHIBIT IVA

PART IV: SUMMARY OF EVALUATION OF PRIMARY WORKSHOP SESSIONS

CONFERENCE EVALUATION REPORT

FORM B: Weekly Evaluation of Daily Morning/Afternoon Workshop Sessions

I. GENERAL EVALUATION OF SESSION

Rating Scale
1 = Not At All / Definitely Not
2 = Occasionally / Not Very
3 = Usually / More or Less
4 = Often / Pretty Much
5 = Always / Definitely Yes

a. Were the objectives of the session made clear to you? 1 2 3 4 5

b. Did the content of the session meet the session objectives as you understood them? 1 2 3 4 5

c. Were the materials used and provided to you up-to-date, pertinent, and applicable? 1 2 3 4 5

d. Was the session worthwhile to you for your needs with respect to curriculum design? 1 2 3 4 5

e. Did the session meet your overall expectations? 1 2 3 4 5

f. Did the content of this session fit well with your overall view of the total conference? 1 2 3 4 5

g. Comments about the session content:

_____

_____

_____

_____

_____

II GENERAL EVALUATION OF CONSULTANT

Rating Scale:
1 = Not At All / Definitely Not
2 = Occasionally / Not Very
3 = Usually / More or Less
4 = Often / Pretty Much
5 = Always / Definitely Yes

The Consultant --

a.	Was very knowledgeable and well prepared for the topic.	1	2	3	4	5
b.	Expressed principles, concepts, ideas, clearly and understandably.	1	2	3	4	5
c.	Presented the material in a well organized manner.	1	2	3	4	5
d.	Presented the material in an interesting fashion.	1	2	3	4	5
e.	Invited questions, comments, discussion of the material and of his ideas.	1	2	3	4	5
f.	Discussed points of view other than his own.	1	2	3	4	5

g. Comments about the consultant's presentation:

_____

_____

_____

_____

SESSION IDENTIFICATION

____ #1 8/7-10

____ Introductory Psychology
____ General College Chemistry
____ Fundamentals of Mathematics
____ Office Simulations
____ Communication Skills

____ Week #2 8/13-16

Mrs. Dieudonne
Dr. Heider
Dr. Washburn
Mrs. Funk
Mrs. Kepner

III CONTRIBUTION OF THE SESSION TOWARD BASIC CONFERENCE OBJECTIVES

Please indicate the extent to which you believe this activity will be of value to you during the coming school year in achieving the long term aspects of the overall conference objectives in your curricular area.

Rating Scale:
1 = Not Very Helpful
2 = Somewhat Helpful
3 = Helpful
4 = Quite Helpful
5 = Extremely Helpful

a. Each participant will modify and/or adapt an instructional system for use at their college. 1 2 3 4 5

b. Each participant will develop an instructional unit which may be used as a part of the instructional system being modified for use. 1 2 3 4 5

c. Each participant will actually implement the modified instructional system at their college and feedback information regarding the use and success of the system implemented to the institute director. 1 2 3 4 5

d. Comments:

_____

_____

_____

_____

IV STRENGTHS AND WEAKNESSES OF THE SESSION Via "CRITICAL INCIDENTS" ANALYSIS

Please identify no more than three (3) each positive (+) and negative (-) "critical incidents" which you believe significantly added to (+) or detracted from (-) the value of this session for you and for your overall benefit from the session and the conference.

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In completing this section of the evaluation, please consider the following --

a. What was the incident, situation, occurance, etc.?

b. Why do you feel it was particularly (+) or (-)?

c. Were there any specific and/or unusual conditions which may have led to this incident?

d. What would you suggest doing about it in a future session of this type -- e.g. how could it be capitalized on if (+), or how could it be avoided if (-)?

#1 (+) _____

_____

_____

#2 (+) _____

_____

_____

#3 (+) _____

_____

_____

#1 (-) _____

_____

_____

#2 (-) _____

_____

_____

#3 (-) _____

_____

_____

NO. 37-304 DATA SHEET, ONE YEAR BY MONTHS (WITHOUT NAMES OF MONTHS)

EXHIBIT IV-B: SUMMARY OF EVALUATION OF PRIMARY WORKSHOP SESSIONS -- OBJECTIVE

IER-32

	BUS	CHEM	ENGL	MATH	PSYCH	BUS	CHEM	ENGL	MATH	PSYCH
	1ST WEEK 8/7-10					2ND WEEK 8/13-16				
No. OF RETURNS	12	9	8	5	4	12	9	7	6	6
I. EVAL OF SESSIONS										
a. OBJECTIVES	4.60	4.79	4.40	5.00	4.25	4.75	5.00	4.71	4.83	4.5
b. CONTENT	4.50	4.89	3.75	4.40	4.25	4.54	4.89	4.34	5.00	4.66
c. MATERIALS	4.64	4.89	4.00	4.40	4.75	5.00	5.00	4.57	4.66	4.83
d. WORTHWHILE	4.58	4.77	4.33	4.60	4.50	4.84	4.77	4.38	5.00	4.83
e. EXPECTATIONS	4.60	5.00	4.00	4.20	4.25	4.66	4.77	4.38	5.00	4.16
f. VS. CONFERENCE	4.34	5.00	4.13	4.40	4.25	4.64	4.89	4.14	4.83	4.33
II. EVAL OF CONSULTANT										
a. PREPARATION	4.91	5.00	4.88	5.00	4.50	5.00	5.00	4.71	5.00	4.33
b. CLARITY	4.75	4.89	4.00	4.60	4.50	5.00	5.00	4.14	5.00	4.16
c. ORGANIZATION	4.67	4.56	4.00	4.60	5.00	4.91	4.89	4.29	4.83	4.00
d. INTEREST	4.84	4.77	4.38	4.80	4.75	5.00	4.89	4.14	4.83	4.33
e. DISCUSSION	4.84	4.78	4.63	4.80	5.00	4.91	5.00	4.57	5.00	4.66
f. POINT OF VIEW	4.75	4.44	4.50	4.60	5.00	4.91	4.78	4.43	4.66	4.33
III. VS CONFERENCE OBJECTIVES										
a. INSTR. SYSTEM	4.20	4.44	4.25	4.20	4.25	4.58	4.67	4.29	4.83	4.00
b. INSTR. UNIT	4.20	4.33	4.38	4.40	3.75	4.58	4.56	4.50	4.83	4.00
c. IMPLEMENTATION	3.84	4.33	4.50	4.40	4.25	4.75	4.78	4.43	4.83	4.33

IER-28

EXHIBIT IV-B

EXHIBIT IVC

Part IV: Summary of Evaluation of Primary Workshop Sessions -- Comments

Reference

I-g General Evaluation of Session -- Comments About the Session Content

II-g General Evaluation of Consultant -- Comments About the Consultant's Presentation

III-d Contribution of the Session Toward Basic Conference Objectives -- Comments

IV Strengths and Weaknesses of the Session via "Critical Incidents" Analysis

Note: Due to the generally similar comments for the two weeks sessions, and because of the relatively low response rate from most groups, the summaries presented below represent a combination of the comments from the evaluation instruments submitted for the two weeks.

Business Education -- Ms. Funk

I-g Content

Concepts, materials, implementation were sound, meaningful, adaptable.

Objectives, process, procedures clear and thorough.

II-g Consultant

Knowledgeable, personable, thorough, sharing and adaptive.

Very well prepared and solid implementation.

Capable of merging concepts, tools, people to form a most effective education combination.

III-d Objectives

Definite plans to implement in approach and/or in part if not as this package per se -- some this fall and more extensively in future.

Solid fulfillment of institute objectives and personal expectations.

IV Positive Incidents

Simulation model and materials per se.

Sharing of problems and means of adaptation.

Direct involvement in simulation activity.

Negative Incidents
Individual and group, problems, though handled well by consultant.

Chemistry -- Dr. Heider

I-g Content
Organization, materials, techniques sound and directly applicable.

Met course related needs and provided direction for adaption.

II-g Consultant
Would be difficult to improve on consultant or approach.

III-d Objectives
Can almost use as is for quick implementation.

Provides model for adaption to other content emphasis and varied student types.

IV Positive Incidents
Materials and methodology per se.

Involvement in developing our units with guidance.

IV Negative Incidents
No significant negative comments.

English -- Mr. Kepner

I-g Content
A lot of content ideas but needed better objectives and organization for this setting.

Needed more concerning disadvantaged students.

A good start toward concept of individualization in a difficult area.

II-g Consultant
Interesting but point being made not always clear

Personality sometimes gets in the way of the presentation.

Challenging and provocative, and still effective.

III-d Objectives
Fulfilled institute purpose.

Provided basis for adaptation and expansion;more than a canned package.

Positive Incidents
Individual sessions with consultant.

Handling of initial group interaction problem turned it from negative to positive effect.

Materials for direct use and as base for further development.

Negative Incidents
Initial group conflict, with some carryover

Indirectness of consultant vs making concise point.

Mathematics -- Washburn

I-g Content
Comprehensive and useful as to materials and approach.

II-g Consultant
Practices what she preaches about individualization.

Shows how to adapt materials and approach.

III-d Objectives
Fit well with overall institute as perceived.

Enabled positive revision of own materials.

IV Positive Incidents
Developing own objectives for institute sessions.

Consultant interaction and assistance.

IV Negative Incidents
Participants all heading different content directions, and some with negative attitudes toward institute.

Psychology -- Dieudonne

I-g Content
Generally good, with primary benefit via the discussions.

II-g Consultant
Effective presentation of materials.

Good handling of individual efforts and group interaction and discussion.

IIId Objectives
Good overall fit and value.

IV Positive Incidents
Media presentations as basis for discussion.

Working on individualized units.

IV Negative Incidents
AV breakdowns.

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